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WINNIPEG, MANITOBA, JANUARY 5, 1900.

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Ontario Fat Stock Show.

The Ontario Provincial Fat Stock, Dairy and Dressed Poultry Show was quite a success again this year, every department being ahead of any previous year. It was held in London from December 11 to 15, and although London is in the centre of a great stock raising district, few farmers attended, and the citizens of the city itself paid but little attention to it. The block test for hogs and sheep formed a novel and most interesting part of the show and was most keenly watched by all. Mrs. Yuill's eramming machine for feeding poultry

ways and won the championship for best single animal and also for pair.

Grades and crosses made up a big section. Leask, Lloyd-Jones, Fried & Sons, and Robson were the chief exhibitors.

Dairy cattle made a big showing. The Holsteins won great honor, Rettie Bros.' cow, Aaltje Poseh 4th making 8.48 lbs. of butter in 48 hours on the fair grounds.

SHEEP.

There never was a better exhibit of sheep, and nearly every breed was well represented but Lincolns, and here Gibson & Walker were the only exhibitors. John Park & Son, T. H. Shore, J. Rawlings and Geo. Allen were the chief exhibitors of Cotswolds. Park had the championship and the lead in prizes. Leicester ewe lambs made up a ring of thirteen equal to anything seen at any show. In this J. Kelly was first and second and also sweepstakes. Shropshires were very strong in every section. J. Campbell, R. Gibson and D. G. Hanmer & Sons had it out between them, and when three such breeders and

prize Oxford and the first prize Suffolk, in the order named, dressed the best earasses.

SWINE.

Swine showed a wonderful increase in numbers and also a great change in the number of excessively fat animals. The agitation in behalf of the bacon hog is having its influence and was markedly reflected in the exhibit of hogs. Chester Whites were the banner class in point of number. W. Butler & Son showed a fine lot and won sweepstakes. Berkshires made a fine exhibit, and contest for first place was between Green, of Fairview, and T. A. Cox, of Brantford. The latter got sweepstakes. A pair of Green's sows won first place for bacon hogs and first in block test for Berkshires. Yorkshires were distinguished by their high quality. Brethour had sweepstakes and the lead. Gibson, Featherston and Davis had good entries. In Poland Chinas, Jones and Smith, of Fairfield Plains, made entries. Jones had the lead in live pigs, Smith in the block tests.



Prize Live Stock at the Virden Fair, 1899.

and her work with poultry was of great interest.

CATTLE.

Shorthorns, though not so numerous as last year, were well brought out. The contest for first place in 2-year-olds was between Smith's Free Trade and Fried & Sons' Honest Billy, two well-finished steers. The award went to the former and also championship over all-comers. Capt. Robson had out some nice females and won the female championship with Rosina 2nd, a well-fitted roan.

Polled Angus and Herefords showed together, but there were no Herefords competing. Bowman, of Guelph, had no opposition in cows, but showed well-finished ones. Hall, of Washington, gave him competition in steers and won the championship.

Galloways and Devons competed together. Galloways made the best showing ever seen at a fat stock show. Rudd, of Eden Mills, got a few prizes for his Devons. A. M. & R. Shaw, of Brantford, had the lead over McCrae in the Gallo-

feeders come together it means close work. Gibson got sweepstakes on a yearling wether, closely pressed by J. Campbell's wether lamb. Other breeds were well represented. Grades and crosses were numerous and good. All the leading breeders had a hand in this. Grand sweepstakes of the sheep classes went to Messrs. Jackson's Southdown yearling wether. The Prince of Wales' prize for five pure-bred sheep went to John Campbell's Shropshire pen, four of which were by his famous sire, Newton Lord, and one by a son of his.

The block tests of sheep reversed a number of the awards made alive. The earasses being too fat, too much waste would have therefore to be made. In some cases animals that had not won any award on foot scored up well when dressed. Many useful lessons were learned, but owing to animals all competing together in each class, it was not possible to make the close comparisons that could have been made had there been more classes for slaughtered animals. The judges decided that the first prize Shropshire wether lamb, first

Tamworths did not make as big an exhibit, proportionally, as they did at all the fall fairs. W. M. Smith, of Fairfield Plains, beat all comers for sows under 15 months. Elliott, of Galt, had the lead and championship. Grade classes were well filled, the largest number being Berkshire and Tamworth crosses. In the classes for bacon hogs the grand sweepstakes was won in order by Brethour (Yorks), Featherston (Yorks), George (Tams), Green (Berks).

The block test for pigs was a most interesting one and developed many important points. The sweepstakes for two dressed hogs fell to, 1, Brethour; 2, Green; 3, Featherston. All the dressed earasses were purchased by the Wm. Davies Co., of Toronto.

POULTRY.

Dressed poultry did not make a large exhibit and the dressing of them was not satisfactory. Mr and Mrs. Yuill's object lessons in feeding were closely watched. The birds were killed and dressed in the most approved way at the close of the

show. Mr. and Mrs. Gilbert, of the Central Experimental Farm, purchased a crate of birds on the London market and showed how they should be killed and dressed. Prof. Graham, poultryman at Guelph, had an object lesson in feeding different kinds of food as affecting the color of the flesh.

London was peculiarly well situated for such a show. It was the centre of a rich agricultural district. Live stock breeders deserved well of the people of the cities and towns. They had an industry affording scope for the keenest brains. They had to deal with live animals. Those engaged in this industry have an ideal. It existed in the mind of the breeder. He must have eyes like X-rays. He must study not the

complain of the fact that we have not enough discrimination in the purchase of our live stock. This was not so in England. In England a better article brought a higher price. This exhibition should be an educative medium, reaching out through all classes of the community. He wanted the average of all stock in the country to rise above the present standard. Only the best should be sold from this country. In



On the Fair Grounds at Broadview, Assa., 1899.

Advancing Agriculture.

A popular evening meeting of the various associations connected with the winter show at London was held on the evening of the 13th of December, under the presidency of the Hon. Sir John Carling. He referred with pleasure to the presence of so many distinguished visitors, particularly the Dominion and Ontario Ministers

outside form merely. The work was made more arduous because the determination of success or failure had to be waited for. If they were successful it would add millions to the wealth of the country. Their work had to be done in comparative isolation. Each man did his own life's work. All over the country were men working with their hands and meditating with their minds. They were now gathered to show the effects of this work. People who were

regard to the bacon trade, he told those present that they should be more careful in their export, because, as the English market dropped off in certain seasons, they should not export during the months of October and November.

Hon. Sidney Fisher thanked Sir John Carling for introducing him. Of the men who had succeeded him as Minister of Agriculture for the Dominion none of them had more at heart, or were more solicitous



A Few of the Winners at Crystal City Fair, 1899.

of Agriculture. To agriculture, the most important interest in Canada, and in the world at large, the speaker had given much attention. He had for a time been identified with the interests of agriculture in the Dominion. The produce of Ontario was being sought in the markets of the world, and especially in Great Britain. It was gratifying to know that the different interests were being well looked after.

Hon. John Dryden considered that Lon-

don was personally interested should encourage such men. Mr. Dryden dealt with the objects of the show. It would stimulate the men and encourage them. The judges had an important position because it was not simply a matter of giving so much money to each man, but it would mean the placing before those concerned a certain standard of excellence. Buyers could also assist in giving to the young men an ideal to which they should aim. He desired to

for agriculture, than Sir John Carling. (Applause). Hon. Mr. Fisher said the year had been a very prosperous one among the farmers of the country. In judging of our prosperity, it was a common theme to dwell upon the exports of our country. We were apt to forget that the export was a very small part of the products of the farm. With the single exception of cheese we consumed more on our local markets than we exported, not

excepting butter, although the increase for the year had been 70 per cent. It was important to consider this, because we might over-estimate the importance of one branch over another. Five-sixths of the value and the bulk of the fields of Canada went into the animals. He had been astonished to find this. How readily we

to the standard that had the greatest number of good qualities suitable to the market and conditions in which they lived. He did not find this in Canada, and he had travelled from one end of the country to the other. As a farmer, he had always noticed the live stock, and he had found that they were apparently crossed with

done to Canadian agriculture in having established the experimental farms. Mr. Mills paid a high tribute to F. W. Hodson for his great services. He touched upon the statute labor system as a very bad system, requiring great reform. There should be, he urged, at least five technical high schools in the province. The teaching of



Live Stock Parade at Carberry Fair, 1899.

could then understand the importance of the work of the live stock raisers. This year we had had better prices for cattle and sheep, and also for horses of good quality. Hogs had not brought so much as in some recent years. The prices of poultry and eggs were good, and the market in England was improving. Our dairy products had enjoyed larger prices, and had maintained their high standing, in cheese the first; in butter, substantial gains,

every available breed. At last session of parliament he was asked for a grant to further the interests of live stock, and he was sure they would approve of his selection of F. W. Hodson as Dominion Live Stock Commissioner. But no man could do anything without the co-operation of the live stock men of the country. He trusted that through Mr. Hodson the live stock men of the other provinces could be organized as here, and he knew that the

more practical subjects in the schools he specially urged.

Chas. W. Peterson, Deputy Commissioner of Agriculture, Regina, assured Prof. Mills that the Canadian ladies in the west were not backward on the farm. He had himself seen women don overalls and assist to make the farm "pan out." Few breeders in Ontario realized the enormous market which was opening up for pure bred sires in that portion of Canada lying west



Prize Stock at Carman Fair, 1899.

2 cents per pound more than ever before. The hon. gentleman said the average farmer had not thought of the advantage of breeding to a type in live stock. This, he hoped, would be specially impressed upon the farmers. We went to England for improvement in our stock. And we found the different classes of stock were named from one county or one district; not after certain men. And why? Because not one man, but a whole neighborhood had bred

live stock men of other provinces would not look to Ontario in vain for advice.

Dr. Mills expressed his gratification at seeing Sir John preside at the meeting. He urged the public to give the show their financial support. He complained of the lack of interest Canadian ladies as a rule displayed in regard to farming and live stock. Her Majesty herself was the owner of flocks and herds. He dwelt on the great service which Sir John Carling has

of the great lakes. Mr. Peterson rapidly described the various districts of the Territories and dwelt at length on the stock ranging country proper, which was composed of Western Assiniboia and Southern Alberta. He calculated that to provide for the breeding of the increase in female stock not less than 2,000 bulls would be required annually. After speaking about the methods of stock raising in vogue on the ranche and the system of

stock inspection and branding, as well as presenting an enteresting description of the "round-up," the speaker pointed out that a very dangerous competitor to Ontario existed in the United States, and that several importations of pure bred stock had reached the Territories from there. Mr. Peterson criticized strongly some of the male stock which had, in the past, been brought into the Territories from Ontario, and characterized a large number as only fit for the shambles. He advised Ontario breeders strongly to adopt absolute honesty and integrity in their dealing with western customers, but stat-

ed that in fairness to the breeders present, he was quite prepared to assert that his remarks did not apply to them, but rather to that class of breeders who never had time to attend shows or meetings such as the Winnipeg Industrial.

Jas. Yule, manager of the Prairie Home Stock Farm, Crystal City, is reported to have bought eleven head of choice Shorthorns from J. & W. Watt, Salem, Ont. The purchase includes the members of the show herd which were so successful at the Toronto Industrial last fall.

PROMINENT BREEDERS OF PURE-BRED STOCK IN WESTERN CANADA

WHO THEY ARE, WHERE THEY LIVE,
AND WHAT THEY LOOK LIKE.

A. B. Potter.

A. B. Potter, Montgomery, Assa., is a native of Northumberland County, Ontario.



He farmed there for some time, and has been farming in the west for eighteen years. He was brought up with a liking for stock and has been handling and feeding good stock all his life. It is now seven years since he started breeding

pure bred Holstein cattle and Yorkshire swine. His foundation stock in Holsteins were obtained from Jas. Glennie, Longburn, and R. S. Park. Since then he has obtained a bull from Ellis Bros., Bedford Park, Ont.; a bull and heifer from G. W. Clemons, St. George, Ont., and two heifers from F. Hindmarch Cannington Manor. His foundation stock in Yorkshire pigs was obtained from James Bray, Longburn, Man., and purchases have since been made from D. C. Flatt, Millgrove, Ont., and J. E. Brethour, Burford, Ont. His present stock of Holstein cattle numbers some 11 head, while the Yorkshires total up to about 20 head. Good success has attended Mr. Potter's efforts in the show ring, and his stock has carried off prizes at Winnipeg, Brandon, Regina, Carberry, Portage la Prairie and the local shows at Whitewood, Wapella and Fairmede. Some time ago we gave a photo of Mr. Potter's basement barn, which is 32x74 feet. Later in the year plans were given of his new pigery, which is 24x40 feet.

Alex. Cumming.

Alexander Cumming, Lone Tree, Man., is well known as a successful breeder and exhibitor of Polled Angus cattle at the Winnipeg Industrial Exhibition. He was born at Hamilton, Ont., and farmed for some years in that splendid farming section known as Beverley, south of Galt. Here he laid the foundation of his knowledge of the care of live stock,

which has been of such value to him in the handling of pure bred stock. Mr. Cumming has always used pure bred sires—the best he could get—and is a firm believer in the great good they will accomplish in any man's herd, and especially so if good treatment is also made a part of the programme. His eighteen years' experience with stock in Manitoba only convinces him that this is the best training any man can have for the handling of pure bred stock. Mr. Cumming made his first beginning in pure bred stock by the purchase of a bunch of Shorthorns from Thos. Lane, Birtle, Manitoba, in 1886. He still breeds these useful cattle, but in 1892 added five head of Polled Angus cattle from J. D. McGregor, of Brandon. Later he bought the well-known bull, Victoria Montrouc, from John Traquair, Welwyn, Assa. Mr. Cumming has paid most attention to the black cattle, and it is as a successful exhibitor of these that he is best known. He has good stabling for about 100 head, nicely situated in a beautiful bluff. In all, he has 37 head of pure bred cattle, some 40 grades, besides about 20 horses and a nice bunch of pure bred Berkshire swine.

Andrew Graham.

Andrew Graham, Pomeroy, Man., is a man that is rapidly coming to the front as a successful breeder and exhibitor of Shorthorn cattle and Yorkshire and Berkshire pigs. He has always had a liking for good stock and takes a pride in having the stock about him thriving and doing well, whether pure bred or not. He was born and brought up on the farm, being a native of Percy Township, in Northumberland county, Ontario. This, combined with 21 years of farm work in Manitoba, gives Mr. Graham a wide and varied experience. The foundation of his Shorthorn herd was purchased from Graham Bros., Ailsa Craig, Ont., and consisted of three females of good quality and breeding, in calf to an Indian Chief bull. Stock bulls to head the herd have been purchased from time to time from such well-known breeders as Arthur Johnston, Capt. T. E. Robson and Wm. Redmond. Females of the choicest breeding have also been purchased from

the herds of A. Johnston, Jas. I. Davidson, John Davidson, and J. & W. Russell. Mr. Graham believes in keeping at the head of his herd the very best sire he can procure. As the result of this and of the close, careful study he has always given to stock, his herd has shown continual improvement in quality, and this year stock of his own breeding won him marked honor and credit at the Winnipeg Industrial, not only for the high quality and evenness which they possessed, but for the numerous individual and herd prizes which they won. All honor to the man who wins on stock of his own breeding and fitting. His Shorthorn herd now numbers some 35 head and is headed by Robbie O'Day, weighing 2,780 lbs., 2nd prize 3-year-old bull at Winnipeg last year. With his herd of swine he has been equally successful, having won more prizes on his Yorkshires during the last five years than perhaps any other breeder in Manitoba. The Yorkshire herd now numbers 30 head, including 10 very choice breeding sows, headed by the 1899 sweepstakes boar, Summer Hill Premier (imp.), bred by Sanders Spencer, St. Ives, England. Berkshires number the best part of a score and are of good quality. Mr. Graham has a fine flock of Barred Plymouth Rock fowl, numbering over 100. Great care was exercised in selecting foundation stock, and each year the male birds selected have been the best procurable. The last trio of cockerels obtained from the cast in February last weighed 32 lbs. when 9 months old, and as a result he has a fine lot of young stock. Mr. Graham is bound to come to the front and stay in the front rank as a breeder because given to every phase of his work. He thus sets a good example to every ambitious young farmer in the province.

James Bray.

James Bray, Longburn, Man., is well-known as a successful breeder and an all-round capable judge of pure bred stock. He was born in that famous dairy county of Ontario, Oxford, and all his younger day were spent at farm work in this and the adjacent country of Perth. His early training thus well qualified him to take up the breeding of pure bred stock, which he did some 12 years ago. His long experience of 21 years in Manitoba also gives him a large and varied knowledge of the best conditions for this country. His first venture with pure bred stock was with Jersey cattle, but having attained a high degree of perfection, with them, he sold out and invested in Shorthorns, his foundation stock, some 13 in all, coming from the herds of Smith, Maple Lodge; Birrell, Mosborough, Burns, Rockwood, and Short, of Eramosa. Since then he has purchased one heifer, Guy'sboro Queen, from R. S. Fulton, and one bull, Masterpiece. As a breeder of Yorkshire swine Mr. Bray has attained considerable success. His foundation stock came from Green and J. E. Brethour. He has now 12 fine breeding sows, headed by two exceptionally well-bred boars. In all, he has about 40 head of Yorkshires. His Shorthorns number 21 head, consisting of 3 bulls, 10 breeding cows and 8 head of young stock. He is a careful breeder, a good feeder, and it will not be long before Mr. Bray will be in the front rank as a breeder of Shorthorns.



THE HORSE.**A Sexless Colt.**

At the last county court held at Carberry a well-known farmer sued one of his neighbors for the price of a colt sold by auction, which the purchaser found to be sexless and returned next day. No decision has yet been given by Judge Ryan before whom the case was tried.

A Tragic Horse Race.

Under the above heading a local paper describes a horse race that took place one fine day lately at Neepawa. A syndicate of sports up there owned a capital trotting stallion called "Pliny," and as an occasional victory greatly enhances the value of such a horse, he was matched against a rival called "Little Dan." Considerable money was, we understand, put up on the result. The contest was to be the best two in three, half-mile heats, and quite a number of sports were on the ground when the horses went away for the first heat, after scoring some three or four times. The track was in excellent shape, and the day was quite balmy. From what took place that fine afternoon it would appear that the owners of Pliny were a trifle downy in the matter of horse racing and drove their horse without regard to the fact that he was out of training, and therefore unfit to run in such a match. Dan won the first heat in slow time, and in the second heat Pliny dropped dead at the wire. He had burst a blood vessel, and his owners lost a good horse, mainly, we believe, because, with all their horse lore, they did not distinguish between a seasoned and unseasoned driving horse. It was seen at the first heat that the beast was a little lame and too fleshy. But a little cocaine was administered to deaden the pain. The pain and the good horse are both dead enough now. Experience of this kind comes high, and we hope the men who have bought it will find it worth the money it cost. David Harum, in one of his talks, remarked: "I know when a hoss has stood too long in the barn as well as the next man." Perhaps those Neepawa sports might learn a few things from David if they made his acquaintance.

Rations for Horses:

Most farm horses during the winter are comparatively idle, but because they are idle the ration allowed them must not fall too low. Spring work comes on with a rush and it is prolonged and severe, unless horses are in the best of condition and vigor to start this work they will lose flesh rapidly and not be as able for their work as they otherwise should be. Heavy feeding for a month before spring work begins will not fit a rundown horse. The work of the spring will be best promoted by looking after the horses now. If they are run down they should be fed a ration that will restore their vigor and flesh and not dropped off them on to one that will barely keep them. Feed them a ration that will cause them to gain steadily and by spring they will be in good vigor and ready for hard work, if given exercise. The usual rule for the amount of hay is one pound of hay for each 100 lbs. live weight. Thus a horse weighing 1,200 lbs. should get 12 lbs. of hay a day. Weigh out 12 lbs. and see how much it makes. Most horses get too much hay to eat; and not enough grain with it. If the hay is replaced with straw this is made worse. With the usual ration of hay, a horse will keep in good condition on a peck of oats

BREEDERS' DIRECTORY

CARDS under this head inserted at the rate of \$1.50 per line per year. No card accepted under two lines, nor for less than six months.

D. FRASER & SONS, Emerson, Man. Breeders and importers of Shorthorns, Shropshire and Southdown Sheep. Pedigree Poland China Pigs a specialty, from the best strains in the United States.

W. J. HELLIWELL, Oak Lake, breeder of Short-horn Cattle, Shropshire Sheep, Barred Plymouth Rocks, Light Brahmans and Partridge Cochins. All kinds of above young stock for sale. Prices right.

R. L. LANG, Spruce Bank Farm, Oak Lake, Man., breeder and importer of Shorthorn Cattle, improved Berkshire Swine, White Wyandottes and White Leghorns. Young stock for sale. 2448

WM. McBRIDE, importer and breeder of improved Chester White Pigs. Young stock for sale. Pairs and trios furnished not akin. Address—Wm. McBride, Box 253, Portage la Prairie, Man.

JAMES GLENHIE, Arden, Man. Importer and breeder of Holstein-Friesian Cattle. Bull Calves of the famous Teake strain for sale. Write for prices. Box 95.

J. MOIR, Glendinning, Man. P. China Pigs, B. P. Rocks, L. Brahmans, S.I. Wyandottes, B. Turkeys, P. Ducks. Orders booked for pigs and eggs.

KENNETH MCLEOD, Dugald, Manitoba. Chester White and Suffolk Pigs for sale. My stock are prize winners at the Winnipeg Industrial Exhibition.

JAS. TOLTON, Walkerton, Ont., importer and breeder of Shorthorn Cattle and Oxford Sheep. A number of exceptionally fine young bulls. Prices right.

HENRY LAYCOCK, Rosebank, Man., breeder of Shorthorn Cattle and P. China Swine. Young stock of both classes for sale. Prices satisfactory.

F. GREEN, Moosejaw, Assa., breeder and importer of high-class Shorthorns. Some fine young stock for sale, climatized to Western range.

K. MCIVOR, Roselea Farm, Virden, breeder of Shorthorn Cattle and introducer and grower of Western (or native) Rye Grass. Seed for sale.

JOHN TURNER, "Bonny Brae Farm," breeder of Polled Angus Cattle. Young stock of both sexes for sale. Address, John Turner, Carroll, Man.

H. BYERS, Macgregor, Man., breeder of Jersey Cattle. Largest herd in the West, headed by Rover Pogis, No. 41020. Young stock for sale.

JAS. ROBERTSON, Beaver Brand Farm, Glendale P.O., Man. Poland China Pigs, Hereford Bull Calves; also Brome and Rye grass seed for sale.

A. & J. MORRISON, Carman, Man. Breeders of Shorthorn cattle. One 11 and one 24 months old bulls of exceptional quality for sale.

W. C. EDWARDS & CO., North Nation Mills, P.Q. Importers and Breeders of Ayrshire Cattle Shropshire Sheep and Berkshire Pigs. 1642F

J. VAN VEEN, breeder of Galloway and Hereford Cattle and Shropshire Sheep, Lake View Ranch, File Hills, Fort Qu'Appelle, Assa. 1588

BRAMPTON JERSEY HERD. Full stock of A. J. C. C. Cows, Heifers and Bulls. Extra quality. B. H. Bull & Son, Brampton, Ont.

W. C. EDWARDS & CO., Rockland, Ont., Importers and Breeders of Shorthorn Cattle, Shropshire Sheep and Berkshire Pigs. 1643F

ROBERT WHITE, Wakopa, Man., breeder of Shorthorns. Herd headed by "Crimson Chief" (24057) Young stock for sale.

L. A. BRADLEY, Portage la Prairie, Manitoba, breeder of Tamworth Pigs. Young Pigs for sale.

JAMES RODGERS, Paulina, Alta., breeder of Polled Angus Cattle. A few young bulls for sale.

F. J. COLLYER, Welwyn, Assa., breeder of Polled Angus and Berkshires. Young Pigs for sale.

W. M. SMITH, Fairfield Plains, Ont. Ayrshires, Southdowns, P. Chinas, Duroc Jerseys, Poultry.

WM. CHALMERS, Hayfield, Man., breeder of Shorthorn Cattle. Correspondence solicited.

GEO. ALLISON, Burnbank, Man., breeder of Shorthorns and Leicesters. Stock for sale. 2481

STEEL BROS., Glenboro, Manitoba. Breeders of Ayrshire Cattle. Young Stock for sale. 1731F

JAMES STANCOMBE, Cartwright, Man., breeder of Shorthorns. Three choice-bred Bulls for sale.

THOS. McCARTNEY, Longburn, Man. Ayrshire Cattle. A splendid pair of young bulls for sale.

JAMES STRANG, Baldur, Man., Shorthorns. Excellent milkers. Some fine youngsters on hand.

ALEX. MCNAUGHTON, Roland, Man., breeder of Shorthorns and Pol. Chinas. Young stock for sale.

JAS. GORRELL & SONS, Pilot Mound, Man., Short Horn breeders. Fine young bulls. Prices right.

THOS. H. WEBB, Clearwater, Man. Breeder of Berkshire Swine. Correspondence solicited.

W. E. BALDWIN, Manitou, Man. Young Tamworth Pigs of all ages for sale cheap from imp. stock.

A. B. SMITH, Moosomin, Assa. Breeder of Cots-wolds, Southdowns; Berkshires, Chester Whites.

WALTER JAMES, Rosser, Man. Breeder of choice Shorthorn Cattle and Berkshire Swine.

JOSEPH TAYLOR, Fairfax, Manitoba, breeder of Shorthorn Cattle. Young stock for sale.

JAMES WILSON, Innisfail, Alta., breeder of Shorthorns. One fine Alberta-bred bull for sale.

F. MURDOCH, Bru, Man. Shorthorn Cattle, F. Yorkshire Swine and Shropshire Sheep.

JOHN S. GIBSON, Morden, Man. Shorthorns and Poland Chinas. Young stock for sale.

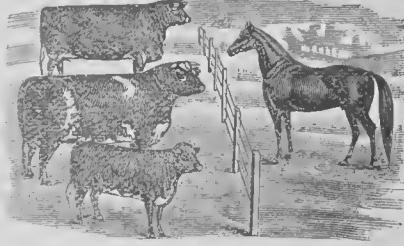
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Write for what you want.

Price right. Stock of the best.

FOREST HOME FARM.

6 YOUNG BULLS by Manitoba Chief and Robie O'Day, and out of some of our best cows.

9 BERKSHIRE SOWS, of choice quality and breeding, from 5 months to 3 years.

The standard of our Yorkshire herd is steadily improving. Our stock boars (one winner of Sweepstakes at last Industrial) are grand specimens of the breed. A choice lot of sows ready to breed. About 50 B.P. Rock cockerels, strong, healthy birds of great size and good marking. All at reasonable prices.

ANDREW GRAHAM, Roland, N.P.R. Carman, C.P.R. Pomeroy P.O., Man.

R. MCLENNAN, Moropano P.O., Man. Lakeside Stock Farm.

SHORTHORN COWS AND HEIFERS of first-class breeding for sale, in calf to imported bull Sir Colin Campbell.

HOPE FARM ST. JEAN BAPTISTE, MAN.

Headquarters for GALLOWAY CATTLE.

Apply to T. M. CAMPBELL, Mgr.

AYRSHIRE BULL for sale, 4 years old, dark red, bred by Smith, Fairfield Plains Sure and good stock-getter. D. McCuaig, Macdonald.

A fine 7 months old registered and grand lot of B.R. Cockerels for sale cheap. J. T. THOMAS, Portage la Prairie

JERSEY BULL for sale, 4 years old, dark red, bred by Smith, Fairfield Plains Sure and good stock-getter. D. McCuaig, Macdonald.

a day if he is not working. If he is working hard eight or nine hours a day a 1500 lb. horse should have half a bushel of oats per day. If straw is fed in place of hay then the ration of grain must be increased. If oats are scarce or too high in price they may be replaced by half cornmeal, quarter middlings and quarter bran, fed dry. This will likely be cheaper than oats and will at least give variety. If you are wedded to oats, variety may be secured by replacing part of the oats with this mixture. Remember much of the success of next spring's work depends on the winter care of the horse. It is false economy to let them down in flesh and also in vigor by feeding a poor ration.

There have been several cases of pernicious anaemia in horses in the Yorkton district of late. Dr. Simpson, local veterinarian, has had to treat some bad cases, mostly with good success, however.

The general rise in the price of all iron goods will, sooner or later, be felt at the blacksmith's shop. In many American cities prices for shoeing have been advanced about 25 cents a set, and at nearly all repair shops a slight advance has been made.

CATTLE.

Live Stock Conventions.

At a union meeting of the directors of the Cattle Breeders' and Sheep and Swine Breeders' Associations it was decided to hold the annual conventions the third week in February. The sheep and swine breeders will hold their meeting on the 21st and the cattle breeders theirs on the 22nd. A union meeting with the Dairy Association will be held on the evening of the 21st. A good programme is being arranged for, and an effort will be made to secure the services of Mr. and Mrs. Yuill, of Carleton Place, Ont., to give addresses in connection with the live stock meetings and the dairy convention. Considerable business was transacted at the meeting. The transportation question was thoroughly discussed, and the directors will work in harmony with the Northwest government in their efforts to improve the stock of the west.

In arranging the meetings advantage has been taken of the reduced rates granted the curlers attending the bonspiel. Tickets at single fare for the round trip will be sold up to Monday, February 19th.

The Smithfield Fat Stock Show.

This great show, celebrated the world over, was held at London, Eng., the week before Canada's great fat stock show in London, Canada. The entries were not quite so large as they were last year, but last year was the centenary show and special effort was made to get out a big exhibit.

"All roads lead to London," and the very best of the fat stock at other shows usually find their way to Smithfield. The main feature of the show this year was the success of Queen Victoria as a breeder and feeder of fat stock. Some years ago her manager bought in promising animals and finished them for market, but this being objected to by other exhibitors, he began breeding his own and with greater success than ever. The Queen's Hereford steer was this year the champion at Norwich, Birmingham and London. In a strong lot of yearlings Her Majesty's Herefords won

1st and 2nd places. Her Devon heifer won the championship of the breed. She also won the championship of the carcass competition with an Angus steer that killed 68 per cent. of fine beef. Altogether the champion Hereford won nearly \$5,000 worth of ordinary and special prizes and then sold dead for \$750.

A North of Scotland breeder, John Ross, of Meikle Tarrel, has first and last sent many winners in the Shorthorn and cross-bred sections. This year's Birmingham champion, shown by W. B. Learner, the pure Shorthorn heifer, Patience, of his breeding, was reserve for the championship. The champion of the cross-breds, also shown by Mr. Learner, was "Let 'Em All Come." Meikle Tarrel had several other prizes on his own account. Another exhibitor from the far north of Scotland was J. D. Fletcher, whose steer, Sunray, was 2nd to the champion. His steer under 2 years was at the top of the carcass list for his age. Another far north man, J. Bruce, had the Shorthorn Shorthorn steer.

Polled Angus cattle have won many high honors in the past, but this year they fell behind. The champion of the breed was the Strathmore heifer, Victoria of Glamis. The Queen had championship of the over-2-year carcass competition with a steer of the breed.

Some very choice Galloways were shown, the championship going to a splendid steer, Substance, shown by Biggar & Sons, Dolbeattie, well-known breeders.

Welsh cattle are much favored as butchers' cattle. Champion of this breed was a 2 years 10 months old, weighing over 1,900 lbs, and 3rd in the carcass competition.

Scotch Highlanders were most popular of all. The champion weighed, at 3½ years, 1,940 lbs.

Miss Alice de Rothschild had championship for yearlings and won other high honors.

Championships for long woolled sheep went to Scotch Blackfaces, for short wools to Suffolks, a breed almost unrivalled for the amount of choice lean meat they carry.

Besides the show proper, there were 4,000 choice beef cattle sold. The highest prices made were 15½ cents. for "prime Scots," to 10½ cents for good ordinary beef. Choice beef and mutton went as high as 25 cents. These prices are for the carcass. Polled Scotch cattle under two years are most favored by the London butchers.

Free Transportation for Bulls.

In the November 20th issue The Farmer announced that the Territorial government had completed arrangements with the C. P. R. Co. for free transportation of several carloads of pure bred sires. Circulars were sent out to the agricultural societies to be read at the annual meetings. The offer last year was not taken advantage of as it should have been and the Department of Agriculture at Regina are therefore trying to make the terms better known throughout the West and have sent out the following circular explaining the terms upon which these bulls can be obtained. The following is the circular:

"Importations of pure bred bulls, under government auspices will be carried on under an arrangement with the Canadian Pacific Railway Company, whereby the bulls (which must be delivered at some convenient point on the said railway in Manitoba or Ontario) are gathered and forwarded by carload lots to the west in charge of a reliable man and distributed at the various destinations. The government and railway company defray all expenses over and above the sum of \$5 per

head, which must be deposited by the applicant. As soon as parties are in a position to make application to the department for the transportation of stock, blank forms will be supplied them, which are to be filled out, verified by statutory declaration and returned to this department, accompanied by the sum of \$5.

"Stockmen availing themselves of this offer will have to make their own arrangements through friends, or otherwise, regarding the purchase of their bulls. If, however, a person is selected by a sufficient number of applicants to purchase a full carload of bulls for them, he will be furnished free transportation to Manitoba or Ontario and return in charge of the car. His incidental expenses, up to the time of taking charge of the stock in the east, must be defrayed by the parties he represents. If intending purchasers are unable to make either of the above arrangements they will, upon application to the department, be placed in communication with some reliable person nominated by the respective live stock associations in Manitoba or Ontario, who will purchase for them what stock they require for a small commission.

"It is not necessary for applicants for transportation of stock under this arrangement, to make their purchases in the east prior to filing their applications with the department. If anyone desires to obtain the reduced rate in question, he should file his application at once, and he can then make his arrangements regarding the purchase of his stock in the east at his convenience. As the shipment will not take place until May, 1900, there will be ample time to complete such arrangements.

"As above indicated, only male stock can be accepted for transportation under the arrangement outlined, and no more than two head can be shipped to any one applicant at the \$5 rate. All stock will be accepted for transportation at owner's risk only, but every precaution will be taken to ensure safe delivery.

"As the number of bulls which it is intended to bring into the Territories during the coming spring, under the foregoing scheme, is at present limited, applications will be considered in this Department on a basis of priority.

"Address applications to the Department of Agriculture, Regina, Assa."

Beef Cattle at Chicago.

This last Christmas season has put the cornerstone on a year in which beef cattle have been steadily appreciating in a way most satisfactory to the producers. Two cattle of extra finish made \$8.50 per cwt. on foot, and two cars of high grade Polled Angus made \$8.25. Galloways made the same figure. In 1883, and in June, 1882, \$9.30 was paid for Shorthorns. Four years ago the best figure was \$5.50, and the difference of 3c. on a 1,400-lb. steer between then and now is \$42. Why are such figures going now may be asked. One reason is that work is plenty and wages are rising all round. The other is that the area of free pasture is getting narrower, and it costs more to produce all kinds of live stock. Anyway, times are good for the beef producer, and there are more inducements now than ever before to give attention to the improvement of not only cattle, but every kind of live stock.

A striking example of the old style Texas long horn steer, now 8 years old, will be sent over to the Paris exhibition. He weighs 1,700 lbs. and the tips of his horns are 9 feet 7 inches apart. He was fed on prairie herbage, mesquite grass, cactus and similar feed. Along with him will be sent a mule 5 years old and 38 inches high.

Dominion Cattle Breeders' Ass'n.

The annual meeting was held on the 11th of December at the fair grounds of the winter show. President J. I. Hobson, in his address, referred to the great increase in the trade in pure bred cattle brought about by the efforts of the association in securing reduced freight rates on stock. He spoke highly of the faithful service of the retiring secretary, F. W. Hodson, and suggested that he be made a life member of the association. This was done. D. McCrae and J. I. Hobson were appointed a committee to report upon fraudulent practices at fairs.

The following officers were elected;— Pres., R. Gibson, Delaware; vice-pres., A. Johnston, Greenwood; vice-pres. for Ontario, H. Wade, Toronto; Manitoba, Hon. T. Greenway, Crystal City; Northwest Territories, C. W. Peterson, Regina; Quebec, H. D. Smith, Compton; Nova Scotia; C.A. Archibald, Truro; New Brunswick, T. A. Peters, Fredericton; British Columbia, D. Ladner, Ladner's Landing; Newfoundland, Hon. C. Dudder, St. John's; P. E. L. Senator Ferguson, Charlottetown.

During the meeting T. S. Woodward, of Lockport, N. Y., gave an address upon "The Ideal Dairy Cow." After introductory remarks concerning the gradual evolution of the animal to its present state, the speaker devoted some time to a statement of the different characteristics of the two divisions of cattle, the beef cow and the dairy cow, and stated that it would be impossible for a dairy cow to become a model beef animal, and *vice versa*. He utilized illustrations and quoted figures to prove that the power of a dairy cow to eat, digest and assimilate food puts more milk into the milk pail than that power in beef cattle puts fat upon their backs. In order to do its best, a cow must be able to eat, digest and assimilate food, and to do this it had to be of a highly nervous organization. He mentioned the following characteristic features by which a model dairy cow could be recognized: The hair should be thin and silky to the touch, the skin thin and soft, secretions, abundant, oily and yellow; breadth between the eyes, indicating great brain power; large mouth, strong jaw, bright eyes, large lung capacity, hollow back, rump showing great pelvic power, large ability to store food, thigh well out, giving capacity for udder, which should be close up to the body, long tail; wedge-like shape of the body, so that when standing behind one could scarcely see her fore shoulders; bones small, udder well shrunken after milking, deep shoulder and thigh-pit. These are all evidences of the open organization, which form the distinguishing characteristics of every model dairy cow.

A Golden Rule.

In the management of the herd every animal should be kept thriving. This requires watchful care of every individual. Herein lies the feeder's success; every animal must have enough, all it will eat up profitably, yet no waste allowed. Calfhood is the most important period of a cattle beast's life. Here the future animal is largely made or marred. Mistakes made at this time can never be entirely rectified later in life. By scant feeding much of the profit in after years is cut off. The golden rule in cattle raising is to keep each animal gaining as rapidly as possible until it is either ready for sale or it has attained its maturity.

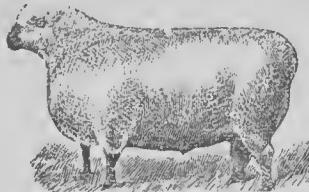
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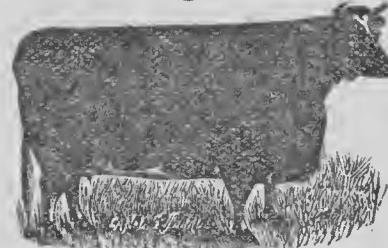
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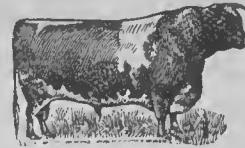
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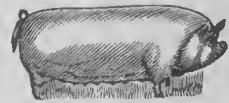
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Among the Shorthorns recently imported from Ontario, I have for sale a few very fine heifers, and the 8 months old bull Sharkey (dark red); also a fine bunch of sows with pig, and a few choice boars fit for service.

Orders booked now for Young Pigs.

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I have been breeding Short-horn Cattle right here for over a quarter of a century. I breed my own Show Cattle, and last year had at the Winnipeg Industrial the Gold Medal Herd. First for Bull and two of his get, and first for Cow and two of her progeny. I usually have stuff for sale, and am always pleased to show it.

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Improved Beef Cattle.

As was pointed out in our Dec. 5th issue, the prospect for an increased demand among the mining camps across the Rockies, as well as for the English markets, is very encouraging. How and where to get them is the all important question. "First catch your hare" is the sensible advice of the cookery book. Having got it, the next question is how to make the most of it. A good deal of the value of the soup will depend on the quality of the hare, and even when we have got the right kind of hare, much depends on the skill of the cook. In other words, we must make sure we have the best kind of cattle to start with, and after that see that they get justice. Let us take a glance at the ranching industry to begin with.

There is a very large area of this country that is likely for a good few years to come to be fit only as a grazing ground for beef cattle, horses and sheep. At present cattle make the heaviest item in our production. How are we to produce them to the greatest advantage? A certain proportion of them may be raised on the ranches where they are to grow up. But when business is brisk this is a rather slow way of stocking our waste lands. For the last season or two there has been a considerable importation from the east, in some cases almost from the seaboard. It is questionable if importations of the quality most common in those far eastern shipments will ever bring much satisfaction. The offspring from dairy cows of uncertain breeding have been raised in cheap and inferior ways, and it would be a miracle if they ever paid for their handling, except on grazing that can be had for the taking. A rather better class of yearling steers are picked up in Ontario and Manitoba, but even when otherwise fortunate, such steers do not always develop into decent export beef. The plain teaching of experience on this point seems to be that if we want to transplant stockers to the prairies, they must be the offspring of mature general purpose cows from pure beef bred bulls. Any other sort may perhaps find buyers at low figures, but low priced stock is generally dearest in the long run.

There has been a considerable demand the last two seasons for Manitoba raised steers, not only in the west, but across the line. This southern demand may be fairly estimated to have added \$5 a head to the value of Manitoba steers. If the western men thought them worth more than they paid before that demand arose, they took care never to let the growers know it till the southern demand became emphatic. The Manitoba farmer too often still regards any cattle stock he may raise as a mere by-product and very few farmers have ever set themselves to study carefully how such stock can be raised at a profit. A well-bred and decently nourished calf, if put through the first winter generously, can be matured into good beef a year earlier, and will lay on more beef at less cost than is possible with a three-year-old of inferior breeding. Usually three years is the selling age of ranche steers.

If we look over the stock in the corrals of such experienced feeders as Dr. Harrison, at Newdale, we find that they are generally well graded up Shorthorns from dairy cows of the same character. Men who know this part of their business are careful never to buy in districts where the scrub bull is abroad, and if there is any practical lesson to be drawn from such facts, it is that the general purpose cow over 1,000 lbs. is the cow to breed from, and the unpedigreed sire the one to be carefully avoided. It is pleasing to note that a good many men who once thought otherwise are now of the same way of thinking. There never was a time in the Northwest when the feeling in favor of

well-bred sires, for beef cattle especially, was so strong as it is to-day. That feeling is being generously responded to by the C. P. R., by the Northwest government, and by the exertions of our best local breeders.

There are unfortunately still a few breeders who seem to forget that blood alone does not make a good beast; scrub treatment very soon makes scrubs of otherwise choice cattle, and it is only by reading the records of the stock associations that we get the assurance that they are worth more than good grades. Pampering may spoil a few well bred cattle, the reverse policy spoils a great many.

STALL FED CATTLE.

It is rather humiliating to find that Canadian fat cattle usually bring a cent a pound less on the English markets than do the American. Yet those same Americans come across to Canada year after year to buy our blooded cattle. And they have the wisdom to do justice to those cattle after they have got them. There are endless varieties of fraud in the manufactured products of the States, but their beef cattle are above suspicion. If they have poorly fed cattle they keep them at home, and the reputation of their cattle is as high as that of their butter and cheese is dubious. We want to learn from them if there is any secret to be learned. The main thing, it strikes us, is that they operate with well graded stock, go slow at the start and stay at it with judgment and skill. We should feel extremely grateful to some of our readers in the Manitou district where feeding has been followed for years with apparent success for hints on this question of profitable stall feeding. Would a rich Brome grass pasture in the fall, when other pasture is dried up, and a few pounds of chop daily, till the cattle need to be tied up, be any improvement on present methods? Too heavy grain feeding to start on is a huge mistake, for the animal's digestive system needs gradual training in the profitable use of concentrated feed. The methods now followed by Dr. Harrison, at Newdale, have been reached after years of experience as the best for this Province of Manitoba. What say you?

Breeding for Usefulness.

In a recent issue of the Breeders' Gazette the Hon. John Dryden, taking the fancy prices obtained by the Scotch breeders, Duthie and Marr for his text, discourses on the qualities that have carried the Shorthorns of those two tenant farmers to so high a place in the estimation of the breeding world. Summed up in his own words the ground of this steadily growing appreciation is that the persistent aim of the originators and perpetuators of these much-sought-for animals is "breeding for usefulness." All Scotch cattle are not sought after to the same extent. We might instance the well-bred stock of Lord Polwarth, several of which have taken championships at the Royal. But his young stock sold at nearly the same time as the last Collynie sale, did not bring half the money. They were of the best known English blood, and in the hands of a breeder of established repute, but only brought an average less than half that of the Aberdeenshire Scotch. Marr and Duthie are but the inheritors of the guiding principle of the lifelong work of Cruickshanks. To produce from the best material they could bring together a type of cattle that would pay, and go on producing others in which the same qualities would be still more clearly visible, was the Cruickshanks ideal, and that ideal has triumphed. Their successors, in both England and Scotland, have held faithfully to the same ideal, which time has done its share to fix more

firmly and win the world's recognition of its value.

In Mr. Dryden's judgment the first idea in the mind of Cruickshanks was a vigorous constitution. This the climate and soil and natural food products of upper Aberdeenshire are admirably fitted to maintain and perpetuate. The second great point was the capacity to lay on flesh as distinguished from fat, and in the best places. The third great point is early maturity. If along with these hereditary qualities we can get individual merit and some of the style—over-estimated by the earlier fanciers, and rather undervalued by some of the Scotch north country breeders—then we have the choicest embodiment of the ideal to be aimed at by the breeder of today.

The value of the stock bred by the Cruickshanks was discerned much sooner on this side of the Atlantic than in Britain, but the buyers, from every quarter of the globe where good breeding is in request, are the surest evidence that their ideal is now amply appreciated everywhere by those best fit to judge. It is not blind tradition but enlightened self-interest that makes "Cruickshank Shorthorns" a name to conjure with from Quebec to Colorado.

Mr. Dryden's confident forecast of the future success of animals so bred can hardly be intelligently disputed. But every one cannot be a grower of pedigree stock of Shorthorn or any other breed. The great thing to be impressed on the mind of every man who raises any kind of stock, either for the butcher's block or the milk pail, is the money value of a sire possessing such characteristics. Said a man the other day, when asked to pay \$2 for the service of a bull, first prize at the Industrial, "Had I known it was to cost that much she would never have gone near him." That is the sort of man that needs to have the service of a good bull for nothing to make him half see the value of a sire such as Mr. Dryden has in his eye, not merely for winning a \$5 prize at a country show, but to add \$5 to the feeding value of every steer he gets. Of course, such a man will do his best to minimize the value of good blood in a calf by miserable care after he has it. But the light is spreading, and one way and another it will by and by get driven into even very thick skulls that good blood pays and scrub blood, in the sire especially, is dearer at 50c. a service than the other sort at \$5.

An experiment is being conducted at Guelph Agricultural College for the purpose of ascertaining the digestibility of corn fodder in its various forms. Green corn fodder has already been experimented with, and now fodder cured in the field, under cover and in the silo will be tried. The object is to find out if possible the relative digestibility of the fodder in these four different forms. Three sheep are being used for the purpose.

Guelph Fat Stock Club held a very successful show this year. The entries were quite large and the average quality higher than for some years. H. Smith, of Hay, showed a very large white steer that attracted a great deal of attention. He is a pure bred Shorthorn and won several special prizes. It was essentially a Shorthorn show in cattle. Perhaps the fattest animal was one of the trio of Polled Angus cattle shown. Herefords were almost absent and only a few Galloways were shown. There was a large show of sheep and the quality high. Hogs also made a great show, the majority being Yorkshires. One sow weighed 823 lbs., and another animal nearly 800. A fine display of poultry was also made. The silver cup, valued at \$250, given for best pair of fat animals, went to J. Fried & Son, Roseville. This firm had also the heaviest animal on the grounds, 2,195 lbs.

Cattle Notes.

Quite a number of the ranchers and large stockmen around Yorkton are having a good deal done in the way of spaying heifers and cows. We believe the result has given general satisfaction.

The North Montana Round-up Association is asking the Great Northern Railway Company to allow \$22.50 for yearlings, \$30 for cows and 2-year-olds, and \$40 for 3 and 4-year-olds killed by that company's trains.

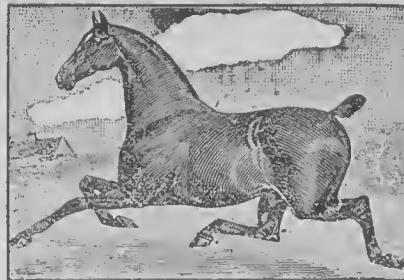
The latest sale of Herefords at Kansas City totalled \$34,975 for 101, or an average of \$344. Armour had one sell at \$1,175. He was from the herd of Queen Victoria. A yearling brought \$1,010. All the animals sold were of choice breeding.

It is well to note that at Chicago grades from well-bred bulls have been turned by skilled feeders into choice beef, and brought fancy prices. It is equally important to note that the gap between well-bred and scrub-bred stockers is growing wider year by year. There are districts within the bounds of Manitoba that skilled buyers carefully stay away from. It costs more to feed scrubs, and when fed their beef is worth one or two cents a pound less than that of the right sort.

Missouri takes a front rank place among the States of the Middle West as a producer of choice beef cattle of all breeds. Two brothers there lately sold 120 head of registered Galloways, several of them at an average of \$167, one cow going up to \$825. These were sold on the farm where they were owned, and considering that no Galloways have been exposed for public sale in the same way for years, it is a striking evidence of the rapidly growing appreciation of well-bred beef stock in the southwest.

The Farmer is sorry that distance precludes it accepting an invitation to attend the third annual convention of the National Live Stock Association, to be held at Fort Worth, Texas, from January 16-19, 1900. If the meeting is as good as the natty invitations sent out there is a good time in store for those who go. The two previous conventions have been held in Denver, Col., and they have been the means of rousing interest in the stock industry of the west. The convention this year promises to excel anything of the past in interest, in attendance and in importance. Reduced fares have been secured on the railways from all directions. Quite a number of Canadians will be present.

To dose a cow pass the left hand over the cow's face, insert the finger under the dental pad, behind the point where the lower incisors can be closed upon it, elevate the head, and thrust the nose of the bottle into the mouth, taking the precaution to allow its contents to flow out evenly, not more rapidly than the animal can swallow them. On the first sign of coughing release the animal, or she may choke and die. When assistance is necessary, the assistant should hold the cow by standing behind the principal, who gives the drink, and grasping a horn firmly in each hand, giving the dose an upward cast. The less restraint the less the liability to accident. There is no harm in grasping the nostrils with the thumb and fingers, and in the case of rough animals, it is necessary; but it causes a certain amount of pain, and this should always be avoided where practicable. The ultimate benefit of the animal and self-preservation alone justify its infliction. In giving a drink to a cow the tongue should not be pressed down—its mobility should be interfered with as little as possible.

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Among the bulls imported by me during the past five years, three have won the sweepstakes at Winnipeg. I have just returned from the East with a splendid bunch of Shorthorns, some of which are good enough to win in any company, if you want show or breeding stock. Am crowded for room, and will sell right. Write for what you want. Both sex.

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JOHN S. ROBSON,
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30 SHORTHORN BULLS

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HEIFERS FOR SALE.

Write me before buying.

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A few early Bull Calves for sale.

JERSEY BULL FOR SALE.

No. 50202, 2 years old in February. Solid color, black tongue and switch. Took 1st prize in Winnipeg as calf.

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My Shorthorn herd is headed by "Best Yet," bred by Hon. John Dryden, of Brooklyn, Ont. A number of young stock of both sexes, all registered, are for sale, and can be recommended as first-class animals.

Correspondence solicited. Prices right.

R. REED-BYERLEY, Cook's Creek, Man., breeder and importer of Clydesdales. Headed by Gem Prince, sired by Cedric. Correspondence solicited.

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Proprietor of Boundary Herd of

POLAND CHINA SWINE

Our herd are direct descendants of such noted hogs as Canada Wilkes, Guy Wilkes 2nd, M. P. Sanders, and the Tecumsehs. Nothing but first-class stock shipped. Write for what you want; satisfaction guaranteed. Prices always reasonable. Nothing but choice sows kept for breeders. We are now booking orders for spring pigs of 1899. We have a few good winter pigs for sale. Write and describe what you want, and we will endeavor to treat you as we would wish to be treated.

About the last of Jan'y, 1900, we will sell our entire herd of 40 Reg. AYRSHIRE BULLS, COWS & HEIFERS; also a Guernsey and a Short-horn Bull and our herd of Red Tamworth. All must go, as business here is being closed up. Ask for Catalogue.

Caldwell Bros., Briery Bank Farm, Orchard, Ont.

When writing advertisers, mention The Farmer.

SHEEP.**Sheep and Wolves.**

The testimony of Wm. Bertram on page 934 of our last issue is well worthy the attention of all who are interested in sheep protection. A woven wire fence costs money, but once there it is permanent, and if others find the same satisfaction from it as Mr. Bertram does, the problem of sheep protection from wolves is solved. It may be mentioned here that a dozen years ago, when Stace Smith was keeping a flock of sheep at Beausejour, wolves would not at first go near a barb wire fence of only two strands and the flock was safe inside. But the wolves somehow caught on to that wrinkle, and in a year or two went under the wire and ravaged at pleasure. Their suspicious nature kept them from going near those mysterious bars for years, but familiarity breeds contempt. There is little fear of Mr. Bertram's defences failing in the same way.

It is a curious fact that Vermont Merinos are finding their way to the very highest places at the great Australian sheep shows. Their strong points are size and extra quality of fleece.

American farmers have done well with sheep this year. Everybody made money on their lambs, and the farmers of the Northwestern States are waking up to the fact that the sheep was pretty nearly made on purpose for them. Sheep talk is popular now, and when men hear anything about sheep, lambs or wool they listen.

The rise in price of Merino wool has set sheep breeders in the U.S. crazy after Merino sires. A few years ago the craze was for the coarse woolled mutton sheep and wise men then predicted that Merino wool would soon go up. The lesson is, having made your choice of a breed of sheep, stay with it, and you will get all the good innings as well as the bad ones, while if constantly changing you are likely to get only the bad years.

A Mr. Ryrie, from Utah, is reported to have brought into Southern Alberta 200 registered Rambouillet ewes. This is the French variety of the Merino breed, and once acclimated they may prove a valuable addition to the sheep stock of the west. The short, dense fleece of the Merino seems admirably adapted for the western range, and the extra size of the Rambouillet gives it an advantage for crossing with the other and better known breeds.

British Columbia as a market for mutton is opening up very rapidly and western sheep men are rejoicing over the good prospects before them. This year the markets in the mining centres took all the sheep there was to spare at good figures and even then it is said that the demand was so great that large quantities of Australian frozen mutton were brought in. In the future sheep will play a more important roll in the west than they have in the past.

In treating bloat in sheep, J. E. Wing, Ohio's well-known sheep man, says the trochar is not necessary. He says: "We merely catch the sheep and hold its mouth open with a small stick and press with the knees sufficient to start the gas." We have never tried anything but tapping and pouring down saleratus water. A good teaspoonful of saleratus in a cup of water will soon start the sheep to belching wind and relief soon follows if the animal is not too far gone.

SWINE.**Dominion Swine Breeders' Ass'n.**

The annual meeting was held during the fat stock show at London on December 13. President George Green presided, and spoke on the importance of adopting the best known methods of feeding, and dealt with the relation between packer and feeder, claiming the former was taking too much out of the latter. Wm. Jones, of Mount Elgin, was elected president, and G. B. Hood, of Guelph, vice-president. A very interesting address was delivered by Prof. Day, his subject being "The Bacon Hog Question." He held that the most important question for the swine breeder to settle satisfactorily was that of the advisability of feeding none but bacon type hogs. The only way to get at an answer was to carefully study the markets for pork and pork products. Investigations had shown that almost the entire home and foreign demand was nearly, and could be wholly, supplied by hogs of the bacon type, if marketed at different seasons and ages. It seemed that hogs of the bacon type were to be the only ones of the future, and it behooved breeders to master the art of feeding and breeding them.

The Breeding Sow.

The starting point of success in the sow meant for ordinary pork raising is to see that she comes from a mother that is an easy feeder and a good nurse. Take care to see that she has not been stunted in the earliest stages of growth for want of enough to keep her in comfort. These are essential. What breed to work on will depend mainly on individual taste and judgment. She should not be bred so early as to injure her own growth or the vitality of her young. If her first litter is fairly numerous, say from 7 to 10 good pigs, and she nurses them well, that is a sow to retain as long as she is fit to breed. Such a sow, properly managed, will bear and nurse 20 pigs in a season, and pay her way with a good profit on all the skill and feed she gets. If she does not keep up to her heredity, is a poor breeder, or a poor nurse, she may have another trial and should that also prove unsatisfactory, she cannot too soon be made into pork. No matter how good she looks she has failed in the main purpose of her existence. Heredity and selection by a man who knows at the same time how to manage his stock are the foundation principles of the work of pork raising for profit. In a year or two by careful management a splendid breeding herd can be established and all the cheaper products of the farm can by this means be readily turned into good money.

R. Squires, of Carman, recently killed two spring pigs seven months old that dressed 190 and 250 pounds each. No effort had been made to produce exhibition growth.

An American exchange says: A pig with an upright ear is brighter, more intelligent and more active and restless than the lop-eared sort, and that the bacon types are more active and more hardy than the lard sorts. Is this so?

By purchasing a boar when reasonably small the expense is not very great, and you can feed and develop him largely according to your own ideas. A breeding boar should not be forced too rapidly in growth, and ought not to be made too fat. A steady growth and development and a good, thrifty condition is what is most desirable in a breeding boar.

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See regular advertisement in last issue of this paper. Absolutely SAFE for any person to use. RELIABLE in results. Special information regarding any case sent FREE on request. Write for circulars. Price \$1.50 per bottle, express prepaid.

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The largest stud of Clydesdales in Canada, headed by the champion stallion of all ages

LYON MACGREGOR.

Stallions, mares, colts and fillies of all ages, from the best blood in Scotland and Canada. Now is the time to purchase a young colt, and raise him yourself. We have on hand colts and fillies, 1-year-olds, 2-year-olds, year-olds. Weanlings weighing over 800 lbs.

Ayrshire bulls and heifers from imported stock. Best milking strains with good teats. Terms reasonable. A visit to Thorncriffle will repay you.

**ROBT. DAVIES,
Thorncriffle Stock Farm, TORONTO.**

GLENWOOD FARM

Wm. B. Cockburn, Souris, Man.

Importer and Breeder of

Shorthorns and Yorkshires

I will arrive with a shipment of Shorthorn bulls and heifers and Yorkshire pigs, selected from Ontario herds. Intending purchasers will do well to write me or come and see them. Quality and prices right. Satisfaction guaranteed.

Commissioner for all breeds of pure-bred stock. Selections personally made from Ontario herds, and delivered to any part of Manitoba. Enquiries solicited.

Clydesdales FOR SALE

Three pure-bred

CLYDESDALE STALLIONS

Two coming two years old and one coming four, of imp. stock and prize winners. Write for particulars.

Address—

JOHN STEWART, SPRINGBANK P.O., MIDDLESEX, ONT.

**K. McIVOR,
Breeder of Roselea Farm, Virden, Man.****SHORTHORN CATTLE**

I have six fine young bulls; also my stock bull, winner of 10 first prizes at 11 shows, two of which were at Winnipeg. Is sure and active. Am only selling because I cannot longer use him in my herd.

CHOICE YOUNG Shorthorns

I offer 8 choice young bulls, sired by prize-winning sires; also a few heifers, 1 and 2 years old.

For particulars, write—

WM. CHALMERS, Hayfield, Man.

Elmwood Stock Farm**SCOTCH SHORTHORNS.**

For sale 3 grand young bulls, all got by imported sires, and out of extra good cows by imported bulls.

H. O. AYEARST, MIDDLECHURCH, MAN.

Home Cured Meats.

The season is at hand for putting by the store of meat for the farm. It may not always pay to kill and sell pork in the local market where the hogs can be sold to good advantage on foot, but it certainly will pay every farmer to kill his own pork and cure it in as nice a way as possible. Those farmers, who are a long way from the packing houses, at such a distance that it costs too much to ship in the hogs, and who have a good home market for nicely cured meats, will find it to their advantage to kill and cure their own pork. There is always a good demand for home-cured meats, and with a little pains every farmer can have nice sweet meats, and many buyers prefer the home-cured to those from the packing houses.

There are two methods of curing pork after it has been properly killed and thoroughly cooled—the brine and the dry salt method.

DRY SALTING.

Dry salting is a very satisfactory way, and some think more rapid than brine salting. We give two plans:

1. Most delicious hams, shoulders, bacon and dried beef are cured by the dry process or without brine. Take one part brown sugar to ten parts salt, and one ounce of saltpetre to each 100 pounds of meat. Pulverize the last finely and mix all together thoroughly. Lay the meat on a bench or table in a place where it will not freeze but will be cool. Rub the preparation all over each piece and pile the pieces together but not over four high. In a week repeat the process, but when the pieces are piled up this time reverse their position, and the sides that were uppermost the first time should now be turned down. In another week make the third application, and in a week or ten days more the pieces are ready for the smoke house. Beef should be smoked a little only, or much less than the pork. Such meat is sweet, juicy and will tickle any palate.

2. The famous Virginia Smithfield hams are cured by the following process:

The hams are placed in a large tray of fine salt, then the flesh surface is sprinkled with finely ground, crude saltpetre until the hams are as white as though covered by a moderate frost—or say use three or four pounds of saltpetre to the thousand pounds of green hams. After applying the saltpetre immediately salt with the fine salt, covering well the entire surface. Now pack the hams in the bulk, but not in piles more than three feet high. In ordinary weather the hams should remain thus for three days. Then break bulk and re-salt with fine salt. The hams thus salted and re-salted should now remain in salt in bulk one day for each and every pound each ham weighs—that is, a 10-pound ham should remain in ten days, and in such proportion of time for larger and smaller sizes.

Next wash with tepid water until the hams are thoroughly cleaned, and after partially drying, rub the entire surface with finely-ground black pepper.

For small lots use to 100 pounds meat six pounds fine salt, two pounds brown sugar, four ounces fine saltpetre and four ounces black pepper. Mix thoroughly and rub in well all over the meat, and especially around the bones. Repeat this twice at intervals of several days or a week, when the meat will be found to be well salted. Be sure the salt is dry and hot when it is applied for the meat will take it better than if it is damp.

BRINE SALTING.

Many good farmers prefer brine to dry salting. The following are well-tried recipes for making the brine. A good tub

or barrel is necessary for this, and it must be sweet.

1. After the meat has been cooled for twenty-four to forty-eight hours, but not allowed to freeze, and the hams and shoulders trimmed, it is packed tightly in a barrel and covered with a brine made as follows:

To every 100 pounds of meat 7 pounds fine salt, 5 pounds sugar, 1½ ounces of saltpetre and four gallons of water. Mix and boil, unless pure, fresh rain water is used, and skim until all dirt or scum is removed. When cooled pour this brine over the meat and put on a weight to keep it immersed. Should any taint or scum be noticed on the brine after a few days the meat must be removed and thoroughly washed in clear water, the brine boiled and the barrel scalded or a new one procured. After ten days or two weeks the meat should be removed and repacked so that all parts of it may become salted. If a piece of steel or a long knife is run in along the bone in the hams and shoulders it will insure uniform salting. For light hams and bacon four weeks of salting is none too long, and for heavy hams and meat that is wanted for keeping through the summer, six to eight weeks is required. After the meat has been salted sufficiently, remove from the brine and hang up to dry before starting the smoke. The meat should be lightly sprinkled with black pepper after thoroughly draining.

2. A prize South Carolina recipe is as follows:

To 100 pounds of meat, use four quarts salt, four pounds brown sugar and three ounces saltpetre. The ingredients to be well mixed, the salt having been beaten fine. When the meat is cold, rub in two-thirds of the mixture and pack meat in a cask. The next day rub in the remaining third, and put meat again in cask, reversing the pieces from top to bottom. Let them remain three weeks, reversing pieces once a week. At the end of two weeks pour off liquor in the cask, boil and skim till clear, and when cool pour over the meat again. At the end of three weeks wash meat in hot water, wipe dry and smoke three weeks, after which bag and hang up.

3. For 100 pounds of beef or pork, use eight pounds of salt, five of sugar (or five pints of New Orleans molasses), two ounces of soda, one ounce of saltpetre, four gallons of soft water, or enough to cover the meat. Mix part of the sugar and salt dry and rub each piece of meat with the mixture. Sprinkle the bottom of the barrel or tub with salt, and pack the meat as closely as possible. After packing the meat, put the remaining salt and sugar into the water. Dissolve the soda and salt-

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**DENTONIA PARK FARM**

EAST TORONTO
COLEMAN, P.O.

W. E. H. MASSEY, Prop.

Address DENTONIA PARK FARM, Coleman, Ont., Canada.

petre in hot water, and add to the brine. When salt and sugar are dissolved, pour the brine over the meat. Cover with a board and weight this down so that the meat will be held in place, and be entirely

**GOLD STANDARD HERD
OF REGISTERED BERKSHIRES.**

Just a few left of either sex. Can supply a few unrelated pairs. Am breeding a number of fine sows for early spring litters, and have already booked a number of orders for spring pigs. A number of grand young B. P. Rock cockerels from eggs brought from Illinois.

Correspondence solicited. Address—
J. A. MCGILL, Neepawa, Man.

FOR SALE, or EXCHANGE
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GALLOWAY BULL

Coming 4 yrs. old. Apply to

ANGUS MCLEOD,
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LARGE ENGLISH BERKSHIRES

A few Sows fit to breed, also some August Pigs. Am breeding some first-class Sows for spring litters. Two first-prize Boars at head of herd. Now booking orders.

Write for prices.

JOSEPH LAIDLER, - - Neepawa, Man.

3 Shorthorn Bulls

For sale. Aged 3, 9 and 11 months.

For particulars, write

ISAAC MOORE, Cypress River, Man.

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3 Reg. SHORTHORN BULLS

Barred Rock Cockerels

from high-scoring imp. stock. A

quantity of BROME GRASS SEED.

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50,000 Skins
wanted during the
winter months. Send
sample skins per
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DENTONIA JERSEY HERD.**2 HANDSOME YOUNG BULLS**

For Sale

Fit for service, one out of imported stock
and one a splendid individual of the St.
Lambert family, and exceedingly well bred.

This herd comprises several head of imported Jerseys.
It won the herd prizes at Toronto and London Fairs
last fall.

last fall.

submerged in the brine. If there is not enough brine, more must be prepared. Do not use the brine warm.

Don't forget that thin pieces and light hams and shoulders will cure much quicker than the heavy ones and should be taken out of the brine before the heavy ones. The same applies to smoking. Some farmers let the pork lie in brine until spring.

SMOKING MEATS.

The thin pieces, shoulders and hams are much improved by smoking. The smoke house should be tight; the tighter it is the more quickly will the work be done. If you haven't a smoke house, use a large packing case. Good hardwood, cut in small pieces, makes the best fire. Start a fire with shavings and add fine wood. It is well to do this in an old milk pan or similar vessel; then, when going nicely, cover with another old one, leaving just enough space for air to get in to keep it going. This will partially smother the fire, making a lot of smoke without much heat. Meat should be hung so the heat will not affect it. A light, uniform smoke will soon give the light, glossy brown color so much desired. A dark brown is not the best. The time required will be from four days to a month, depending upon the steadiness with which the smoke is kept up, the quantity of meat and the tightness of the house. When smoked, the meat should be hung in a dry place. Before doing so, it is well to wrap each one carefully in good strong paper. Several wrappings are better. Some then whitewash the outside, others pack them away in a barrel or bin of dry oats. The idea is to get a dry place.

The Berkshire breeders in the U. S. are pushing their breed as the bacon hog, *par excellence*, and the best of our own Berkshires and many in the United States are long bodied, not too broad, and deep-sided like the large Yorkshire. They have heard that a boom in bacon hogs is on the way.

The man who is not willing to admit that the hog is not a dirty animal when he can get what he wants and keep clean had better not grow pork. Pigs will not grow or thrive unless their beds are clean and dry. They will hunt for things to eat in the mud if they must, but they prefer to eat off clean plates.

There is no stock that will pay a farmer so well as the hog. This is because he is marketable at all stages of his life from the time he is farrowed until full grown or fat. A sow and litter will always sell at top price, and it is not necessary to carry them on to maturity to get the money invested in them. Then, too, hogs can be fattened either in the fall or spring, or whenever it is possible to get grain the cheapest. It must not be forgotten, also, that hogs take more out of grain as a general thing, that is, their digestion is more thorough than other animals, and they will lay on a pound of flesh with less grain than other animals. On the whole, then, where coarse grains can be grown so readily as they can in Western Canada there is no reason why much larger numbers of hogs should not be kept.

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General Passenger Agent, MILWAUKEE, WIS.

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WITH

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FOR
ITSELF.



The above is a cut of FRANCIS J. STOTT'S CONCRETE BARN, BRANDON, MAN., taken in course of construction. The walls and floors are built entirely out of gravel and Thorold Cement, the size of which is 30x40x14 to plate. The walls are 1 ft. thick to plate, and gables 8 in.

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THE WINNIPEG HEATER.

IT can be used in a similar manner attached to the smoke-stack of a furnace, cooking range, or any coal or wood stove. A saving of two or three tons of coal per winter is effected by its use in this way, and much more healthy and comfortable apartments result.

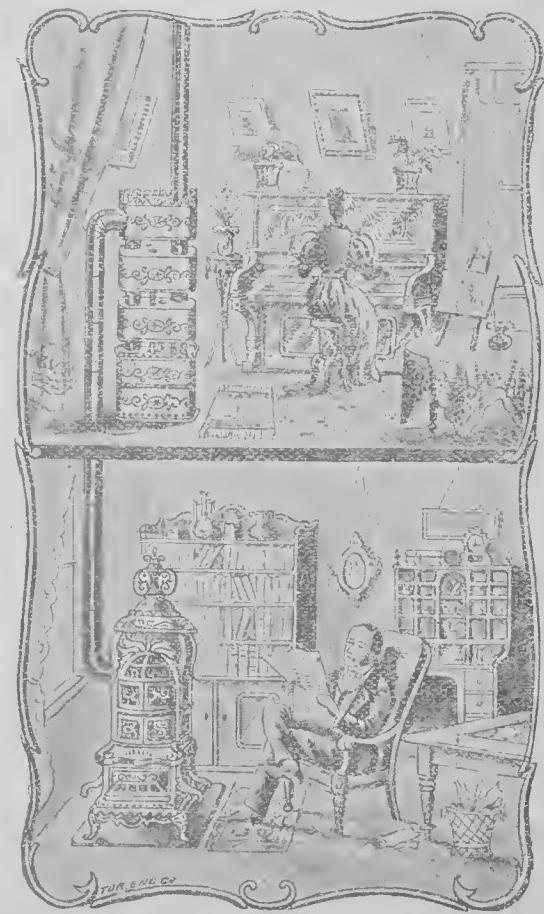
Do not fancy you are economizing by doing without it. You waste far more fuel than it costs every winter.

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Cut showing the Winnipeg Heater heating an up-stairs room.

W. D. Flatt's Sale of Shorthorns.

The attendance at W. D. Flatt's sale of Shorthorns on Dec. 20th was large and representative. Ontario breeders were out in full force and many Americans from the Central and Western States. The sale went off without a hitch and was one of the most important sales held in Canada for many years. Sales like this advertise Canada, and Mr. Flatt deserves the thanks of his fellow breeders. He certainly deserves great credit for the pluck and enterprise he has shown in getting up such a sale and it must be very gratifying to him that everything has gone off so successfully. He proposes making an annual sale in the future. Only one animal comes to Manitoba, an imported yearling roan heifer, Marina, bred by A. Innes, Aberdeenshire, sire Lord Eden. She goes to the Prairie Home Farm at Crystal City. The following is a list of the animals sold, the purchaser and the price paid:—

COWS.

Maud 11th (Imp.), Geo. Harding & Sons, Waukesha, Wis.	\$400
Blossom (Imp.), Robbins & Son, Horace, Ind.	360
Northern Empress (Imp.), A. G. Alton, Ap- pleby, Ont.	435
Celia 8th (Imp.), T. J. Wornall, Mosby, Mo.	500
Flora 7th (Imp.), S. H. Thompson, Iowa City, Iowa	510
Vinella 13th (Imp.), S. H. Thompson, Iowa City, Iowa	445
Primrose 4th (Imp.), Geo. Mitchell, Port Hope, Ont.	420
Jenny Lind (Imp.), and bull calf, J. M. Gardhouse, Highfield, Ont.	535
Duchess (Imp.), J. T. Gibson, Denfeld, Ont.	270
Victoria (Imp.), W. B. Campbell, Campbell's Cross, Ont.	430
Mercia (Imp.), A. Johnston, Greenwood, Ont.	460
Nonpareil Lassie (Imp.), H. Cargill & Son, Cargill, Ont.	460
Roan Empress (Imp.), F. A. Gardiner, Brit- annia, Ont.	375
Crissy (Imp.), R. J. Doyle, Owen Sound, Ont.	300
Strawberry (Imp.), Allin Bros., Oshawa, Ont.	290
Rosewood 77th (Imp.), S. H. Thompson, Iowa City, Iowa	310
Augusta 93rd (Imp.), H. Cargill & Son, Cargill, Ont.	600
Nonpareil 34th (Imp.), A. E. Hoskin, Cobourg, Ont.	600
Clipper 2nd (Imp.), H. Cargill & Son, Cargill, Ont.	350
Marina (Imp.), Hon. Thos. Greenway, Crystal City, Man.	400
Mary (Imp.), A. Johnston, Greenwood, Ont.	255
Sophia (Imp.), J. G. Robbins & Son, Horace, Ind.	235
Montford Honeycomb 6th (Imp.), J. G. Robbins & Son, Horace, Ind.	300
Countess 3rd (Imp.), H. Cargill & Son, Cargill, Ont.	450
Sunny Blink 5th (Imp.), Capt. T. E. Robson, Illderton, Ont.	430
Avarice (Imp.), Lanaghan Bros., Goose Lake, Iowa	300
King's Magic 4th (Imp.), J. G. Robbins & Sons, Horace, Ind.	460
Belladonna (Imp.), H. Cargill & Son, Cargill, Ont.	510
Craibstone Baroness (Imp.), H. Cargill & Son, Cargill, Ont.	610
Daisy 2nd (Imp.), and calf, Geo. Harding & Sons, Waukesha	500
Linda (Imp.), B. C. Rumsey, Buffalo, N.Y.	630
Empress of India (Imp.), H. Cargill & Son, Cargill, Ont.	500
Emma 29th (Imp.), T. J. Wornall, Mosby, Mo.	430
May Bloom, Wright & Boyden, Delhi Mills, Mich.	175
Rose of Trout Creek, J. L. Higgins, Detroit, Mich.	225
Rose of Trout Creek 2nd, J. L. Higgins, Detroit, Mich.	260
Princess of Brant, Wright & Boyden, Delhi Mills, Mich.	260
Lady Brant, and calf, John Smith, Brampton, Ont.	350
Idylwild, W. A. Boland, Grass Lake, Mich.	350
Missie of Springfield, R. Miller, Stouffville, Ont.	325
Canadian Duchess of Gloucester 31st, C. Hentz & Son, Tremont, Ohio	400
Village Lily 3rd, T. J. Wornall, Mosby, Mo.	335

BULLS.

Sir Wilfrid Laurier (Imp.), P. S. Lewis & Sons, Point Pleasant, Virginia	\$900
Precious Stone (Imp.), W. C. Renfrew, Stouffville, Ont.	800
Proud Crescendo (Imp.), T. J. Wornall, Mosby, Mo.	705
Master of the Clan (Imp.), J. G. Robbins & Sons, Horace, Ind.	550
Quarantine King (Imp.), Allin Bros., Oshawa, Ont.	235
Mainspring, James Chinnock, Chatham, Ont.	210

Prince Louis (Imp.), John Isaac, Markham, Ont.	400
Sittyton Style (Imp.), J. R. Lawrence, Canal Fulton, Ohio	365
Royal Archer (Imp.), Lanaghan Bros., Goose Lake, Iowa	600
Masterpiece, Jas. E. Silverthorn, Roseville, Ind.	500
Golden Prince, Geo. Luxton, Kendal, Ont.	155
Golden Earl 2nd, Geo. Harding & Sons, Waukesha, Wis.	155
Duke of Scarborough, Wm. Watt, Salem, Ont.	155
Golden Hero, S. B. Gorwell, Fanshawe, Ont.	185
Golden Treasure, S. E. Cunningham, Burgettstown, Penn.	150
Klondike 2nd, A. C. Henders, Hamilton, Ont.	135
Total proceeds of sale	\$22,940
42 cows averaged practically	400
16 bulls averaged	387.50

In all sixty head were sold, two calves sold with their dams and two others were practically sold the same way. This really leaves only 56 animals sold, or an average for the whole lot of \$409.64. One of the best averages, if not the best, made by Shorthorns in America for some years.

Presentation to Mr. Hodson.

During the week F. W. Hodson, the retiring secretary of the live stock associations, was made the recipient of a very handsome marble clock and an oak cabinet containing a complete silver service. The accompanying addresses were read by John T. Hobson, the veteran breeder. Mr. Hodson expressed his gratitude in a short speech. In regard to fall fairs, Mr. Hodson had long ago come to the conclusion that while there were many held, there were none that could not be improved upon. The system in Ontario had now outgrown its usefulness. The enormous sum of \$140,000 was annually spent on these county and township fairs. By a thorough reorganization, the government could save at least \$20,000 per annum and increase the efficiency of the fairs.

The conclusion of the secretary's address was as follows: "To my successors and to all public servants I would say, let your motto be 'The greatest good to the greatest number.' Show partiality to no one. Serve no party, no sect, set or faction. You will find men, true and loyal, who will stand by you through thick and thin. Others you will find who will never stand by you or any one else. Do not let the acts or words of such persons discourage you or affect you in the least. Never retaliate, use them as you use all others. Do your duty from day to day without fear or favor and without self-seeking, being sure of this, that as you sow so shall you reap."

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Choice Males and Females for sale.

IN BULLS } 4 Calves, 6 months.
 } 2 Yearlings, 17 months.
 } 2 2-year-olds.

During the last 15 years animals in this herd have been successful winners at the Regina Territorial Exhibition, and at Saskatoon, Duck Lake, Rosethorn and Prince Albert fairs. Terms to suit.

J. J. CASWELL,
Saskatoon, Sask.

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Ayrshire Cattle,
Large English Berkshires,
Improved Tamworths.

Young stock for sale at all times. Farm within 5 minutes walk Cen. Experimt. Farm.

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The Veterinary Association of Manitoba

Under the authority of Secs. 18, 19, 20, 22 and 26 of the Veterinary Association Act, 1890 (53 Vic., Chap. 60) the following persons ONLY are entitled to practice as Veterinary Surgeons in the Province of Manitoba, or to collect fees for service rendered as such:

Baker, G. P.	Russell.
Braund, F. J.	Wawanassa.
Brocken, G. E.	Clan William.
Clark, J. L.	Russell.
Coope, H. L.	Minnedosa
Cox, S. A.	Brandon.
Cruickshanks, J. G.	Deloraine.
Dann, J.	Deloraine.
Dunbar, W. A.	Winnipeg.
Fisher, J. F.	Brandon.
Fowler, J.	Souris.
Graham, N.	Dauphin.
Harrison, W.	Glenboro.
Hatton, J.	Alexander.
Henderson, W. S.	Carberry.
Hinman, W. J.	Winnipeg.
Hilliard, W. A.	Minnedosa.
Hilton, G.	Portage la Prairie.
Hurt, W. N. J.	Belmont.
Irwin, J. J.	Stonewall.
Lake, W. H.	Miami.
Lawley, E. H.	Brandon.
Lawson, R.	Shoal Lake.
Little, C.	Winnipeg.
Little, M.	Pilot Mound.
Little, W.	Boissevain.
Lipsett, J. H.	Holland.
Livingstone, A. M.	Melita.
Martin, W. E.	Winnipeg.
McFadden, D. H.	Emerson.
McGillivray, J.	Manitou.
McKay, D. H.	Brandon.
McKenzie, G. A.	Neepawa.
McLoughry, R. A.	Moosomin.
McNaught, D.	Rapid City.
Monteith, R. E.	Killarney.
Murray, G. P.	Winnipeg.
Nagle, J. W.	Morden.
Reid, D. S.	Hartney.
Robinson, P. E.	Emerson.
Rombough, M. B.	Morden.
Routledge, J. W.	Macgregor.
Rowcroft, S. V.	Birtle.
Rutherford, J. G.	Portage la Prairie.
Smith, H. D.	Winnipeg.
Spliers, J.	Virden.
Shoults, W. A.	Gladstone.
Smith, W. H.	Carman.
Stevenson, C. A.	Pipestone.
Stevenson, J. A.	Carman.
Swenerton, W.	Carberry.
Taylor, W. R.	Portage la Prairie.
Thompson, S. J.	Carberry.
Torrance, F.	Winnipeg.
Waldon, T.	Killarney.
Walker, J. St. C.	Sheppardville.
Whaley, H. F.	Glenboro.
Whimster, M.	Ham iota.
Williamson, A. E.	Winnipeg.
Young, J. M.	Rapid City.
Young, M.	Manitou.

The practice of the veterinary profession in Manitoba by any other person is in direct contravention of the statute and renders him liable for prosecution.

W. J. HINMAN, REGISTRAR

Among the Breeders.

Alex. Colquhoun, of Douglas, is moving to Brandon, where he intends to continue in the stallion business.

Jas. Bray and R. W. Glennie have purchased Kilburn, the Thoroughbred stallion owned by J. G. Rutherford, M. P., Portage la Prairie.

A. B. Potter, Montgomery, Assa., reports: "I have just shipped a good Yorkshire boar to Wm. Huggins, Grand Forks, Minn., and have not been able to supply the demand for pigs."

D. H. Andrews, manager of the Canadian Land and Ranch Co., Crane Lake, Assa., sails from Halifax shortly for the old country in order to purchase more pure bred Galloways for his herd at Stair.

Jas. McKenzie, M. P. P., has decided to take a holiday trip to Europe, and in consequence will sell, early in March, his whole farming stock and outfit. The well-known quality of his stock will make that a most interesting sale.

The Farmer is in receipt of a catalogue of the Hope Farm herd of Galloway cattle, together with a few remarks on points and qualities of the breed. Mr. Wm Martin informs us that the Hope Farm herd are doing well. Anyone in quest of Galloways should write T. M. Campbell, manager, St. Jean Baptiste, Man., for a catalogue.

A. B. Smith, Moosomin, Assa., reports the following sales of his Berkshire pigs: One boar and two sows to R. B. Warner, Fletewode, Assa.; one boar to John Cailmont, Assa.; two sows to Thos. Hoard, Fletewode, Assa., and one sow to W. F. Warner, Fletewode, Assa. His stock are all doing well. He has gone to Ontario for another lot of sheep.

J. W. Drysdale, of Neepawa, reports his Shorthorns as doing well. He had six nice red pure bred calves the past season, two bulls and four heifers. He has sold one of the bulls to J. W. Babcock, Orange Ridge, and the other to Alex. Allen, Glenella. Lord Neepawa, the young bull bought last spring from Jos. Lawrence & Sons, Clearwater, has turned out to please the owner very much.

Joseph Laidler, Neepawa, Man., reports a very satisfactory business in Berkshires the past season. Recently he sold three breeding sows—one to J. W. Drysdale, of Neepawa; one to John R. Gunn, Arden, and one to James Shorten, Neepawa; also a young boar to J. A. McGill, Neepawa. He expects to be able to place quite a number of litters on the market soon. The young boar purchased a few months ago from J. A. McGill is turning out well, and he and the older one of Snell's breeding are proving to be a capital pair of sires. Look out for his ad.

J. G. Barron, Carberry, Man., reports his cattle doing even better in his new stables this winter than they did last year. He has five calves from his imported bull, Nobleman. They are all dark red beauties, and he is well satisfied with them, as well he might be, considering that their dams are Topsman heifers, and a cross with such a bull as Nobleman ought to be something choice. He has sold Stanley VI to Geo. Grant, Carberry. His Berkshires are doing well. He has made a beginning in Yorkshires, having got five sows from S. J. Thompson.

Jas. Bray, Longburn, Man., reports the following sales of Yorkshire pigs: C. Smith, Brandon, one boar; W. C. McKay, Prince Albert, one sow and one boar; J. E. Walker, Neepawa, boar and sow; G. H. G. Bray, Medicine Hat, boar; G. W. Vin-

cent, Brandon, boar; Charles Marshall, Brandon, sow and litter; G. W. Hargrave, Glenlea, boar; S. Bates, Longburn, boar and sow; J. B. Jickling, Carnian, boar; W. T. Muir, High Bluff, boar; John Bray, Hamiota, boar; A. C. Stewart, Westbourne, sow; George Renwick, Wellwood, sow and litter; T. W. Wilcock, Souris, sow, and Wm. McLeod, Longburn, boar. His pigs are doing well and he has a nice lot of sows. His Shorthorns are coming on nicely and a few nice calves have made their appearance.

F. W. Brown, Plain View Stock Farm, Portage la Prairie, Man., writes: "Since writing you last my stock has all been coming on with rapid strides. Lyndhurst 4th, 22995, and Spicy Robin, 29576, are both gaining fast. Mr. Lynch and others who have seen them think they are far ahead of what they were at fair time. The females are all in better fit than they ever were at this time of the year. Phoeby has just dropped a fine red bull calf, sired by Prince of Sunnyside. Another fine one is a dark red bull got by Lakeside Hero, 19458, dam Orienta, 15092, full brother to the Manitoba bred heifer I won first with at Portage la Prairie and Brandon shows. My Berkshire herd all came into the pens one week ago in good form. I have a larger herd of breeding sows than I ever had in the past, 16 in number—all prize winners, and although I have fed no grain since July, they are all in good breeding condition. The Cotswolds are also doing well, and well they might after such a beautiful fall. I have a few choice August and September pigs of both sexes, also a few choice ram lambs. My sales have been good since writing you. Spring stock all sold out, excepting one sow for breeding. Amongst other sales I might mention: One five months old bull calf to A. F. Blair, Cando, N.D., for \$150; one bull to Wm. Wilson, Theodore, Assa.; one bull calf to L. O. Patterson, St. Francois Xavier; one Shorthorn heifer to John Little, Gladstone, N.D.; also a boar. Boars went to the following parties: Jas. H. Daily, Killarney; George Daise, Westbourne; G. H. Wells, Willow Range; Thos. Roberts, Neepawa; E. Henderson, Swan River; Jas. Yule, Crystal City; J. L. Stewart, Plumas; A. G. E. Lowman, Midway; A. McLean, Minnedosa; J. G. Barron, Carberry; Geo. Imison, Stony Plain, Alta.; George Guissel, Makinak: Henry Little, Oakville; T. R. Patterson, Hayfield; John Stott, Brandon; Jas. Forbester, St. Mark's; Robt. Forbes, Rathwell. Sows went to the following parties: Messrs. Stott, of Brandon, 5; T. Van-Tassel, Brandon, 1; J. R. Henry, Chater, 1; J. A. Fraser, Portage la Prairie, 2; James Yule, Crystal City, 2; one each to A. G. E. Lowman, Midway; Geo. Imison, Stony Plain, Alta.; Emerson Bligh, Millwood; A. McLean, Minnedosa; S. Coxworth, Dauphin; Jas. Walker, Ochre River; Robt. Geddes, Minto, N.D.; Isaac Henderson, Ochre River; Wm. Crowell, Napinka; Wm. Lidster, Birtle; a Cotswold ram to E. C. Whithern, Innisfail, Alta., and an ewe and ram to James Taylor, St. Mark's. I could have sold as many more April and May pigs if I had had them. I have quite a number of orders booked for spring litters. Intending purchasers will do well to order early. I advise customers from Alberta and British Columbia to order young stock and thus save express charges. I intend, at the next annual breeders' meeting, to make a move to try and have the different transportation companies take stock long distances, single animals or more, by freight, have it the duty of employees in charge of such stock to feed, water and care for them, according to directions attached to crate or otherwise by the shipper, and sufficient feed sent along for the full time on journey."



LUMP JAW QUICKLY CURED.

A case of lump jaw in your herd means immediate loss; it may mean the infection of the rest of your herd; it may result in the distribution of the germs all over your pastures. All loss and danger can be positively averted by prompt use of

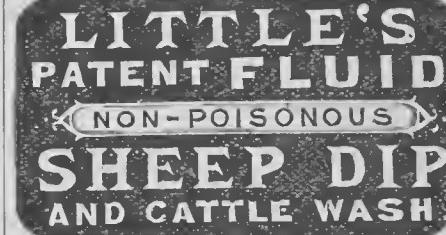
Fleming's Lump Jaw Cure

The only radical cure known. Is endorsed by the most prominent ranchers and shippers of the continent. Easy to use. Is applied externally. One to three applications cure. Leaves jaw sound and smooth. Cannot harm in any way. One bottle usually cures two or three ordinary or one severe case. Price \$2.00. Sold by druggists. Can be sent anywhere by mail.

Money cheerfully refunded if the remedy ever fails.

FREE:—Some important reports and an illustrated treatise on Lump Jaw. Write for them.

FLEMING BROS., Chemists,
St. George, Ont.



The Original Non-Poisonous Fluid Dip

Still the Favorite Dip, as proved by the testimony of our Minister of Agriculture and other large Breeders.

FOR SHEEP.

Kills Ticks, Maggots; Cures Scabs, Heals Old Sores, Wounds, etc., and greatly increases and improves growth of Wool.

CATTLE, HORSES, PIGS, Etc.

Cleanses the skin from all Insects and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals Saddle Galls, Sore Shoulders Ulcers, etc. Keeps Animals Free from Infection.

NO DANGER, SAFE, CHEAP AND EFFECTIVE.

BEWARE OF IMITATIONS.

Sold in large tins at 75 CENTS. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders, Ranchmen, and others requiring large quantities.

SOLD BY ALL DRUGGISTS.
SEND FOR PAMPHLET.

ROBERT WIGHTMAN, Druggist, Owen Sound.
Sole Agent for the Dominion. 1874

WANTED RELIABLE MEN

Good honest men in every locality, local or travelling, to introduce and advertise our goods tacking up show-cards on fences, along public roads and all conspicuous places. No experience needed. Salary or commission \$60 per month and expenses \$2.50 per day. Write at once for full particulars.

THE EMPIRE MEDICINE CO., London, Ont.



Answers to Questions.

By an Experienced Veterinary.

As it is desired to make this column as interesting and valuable as possible to subscribers, advice is given in it free in answer to questions on veterinary matters. Enquiries must in all cases be accompanied by the name and address of the subscriber, but the name will not be published if so desired. Free answers are only given in our columns. Persons requiring answers sent them privately by mail must enclose a fee of \$1.50. All enquiries must be plainly written, and symptoms clearly but briefly set forth.

Bloody Milk.

Old Subscriber, Whitemeadow, Assa.: "I have a newly calved cow; about ten days after calving she commenced giving bloody milk from one teat. It is now over one week and she is no better. She is fed on sheep oats and oat straw. Please prescribe."

Answer.—Get two or three ounces of belladonna ointment at the drug store and rub a little into that quarter of the udder twice a day. Milk out clean four times a day and don't feed much grain or bran until the udder is better.

A Barren Cow.

Subscriber, Napinka: "I have a large fine pure bred Shorthorn cow, nine years old. She has not raised a calf in over two years. She comes in heat regularly, has run with a bull nearly all of this time. She has raised three or four calves and has been served by a scrub bull. She is quite fleshy now and very healthy. Please advise me what to do that I might get her breeding again."

Answer.—Bleed her in the neck vein, taking away a gallon of blood. Feed her upon straw and nothing else, and let her run about as much as possible. Turn her out every day that is not entirely too bad. In fact, try to get her thin and hard. She has fatty degeneration of the ovaries or womb and exercise and hard living are the only cure for it.

Lice and Worms.

Hiawatha, Neepawa, Man.: "I have an old horse which is constantly rubbing his tail and scratching and biting at his sides and shoulders. Have not examined him closely enough to know if he has lice. (1) Is such conduct attributable to the presence of lice, or does it indicate worms or other trouble? (2) What would you recommend as the best cure for lice on horses—something which could be used during winter months? What is the best cure for worms?"

Answer.—Yes, most likely you will find lice if you look closely. Worms sometimes cause itching at the root of the tail, but not elsewhere.

2. White precipitate. Dust a little into the hair along the back and then curry the horse.

3. For round worms, santonin; for tapeworms, oil of male fern.

Lameness.

W. H. B., Millwood, Man.: "I have a horse, seven years old, driver, walks lame, after being driven, in fore feet, stands with the off foot forward when in stable; also keeps lifting it every now and again. Think it might be a strained tendon. Would you kindly let me know what treatment he should have?"

Answer.—If the tendons are swollen and tender bathe them in water as hot as can be borne, then dry them, rub in a little tincture of arnica and bandage the leg with a dry woollen bandage. If the tendons are not sore to the touch, blister them by rubbing in for ten minutes an ointment composed of 2 drachms powdered cantharides and one and a half ounces of lard. Rub in vigorously after clipping off the hair. Do not use the horse until fully recovered or the strain may become worse again.

Lameness—Feeding Barley.

Subscriber, Barnsley: "1. I have a mare eight years old and weighing about 1,600 lbs. that is lame on her hind leg. The only visible cause is a swelling about the size of an egg on the cord in the back of the leg just above the pastern. She has been lame for some time. What can I do for her?"

"2. What is the most satisfactory way to feed barley to horses so as to get the best results?"

Answer.—1. Clip off the hair on the swelling and blister it repeatedly by rubbing in a blister containing red iodide of mercury and lard (1 to 8). Rub well for ten minutes, then tie her head so that she cannot bite it, and after 24 hours wash the part and smear it with lard or vaseline. Repeat the blister in ten days.

2. Barley should be fed either boiled or chopped. The former is better. A quart of barley (raw) is plenty for any horse and when beginning to use it, commence with half the quantity.

Edema.

J. H., Maple Creek, Assa.: "I have two cows with swellings on the right side of the stomachs. It comes first just at the right side and almost in front of the udder and then extends right along and gets to that size that the animals can hardly walk. One has been so for several months and the other seems to be going the same way. What is the cause and the treatment?"

Answer.—Swellings of an oedematous or drop-sical nature appear at the lower surface of the body when the circulation is bad or the blood impoverished. When the system is toned up and the blood contains sufficient fibrin the swelling will gradually disappear. Give the cows a teaspoonful (small) of powdered sulphate of iron in their feed twice a day and one ounce of solution of calcium chloride once a day. The latter must be given from a bottle with half a pint of water. Rubbing the swelling with camphorated oil will assist in removing it.

Rheumatic Synovitis.

P. S., Bradwardine, Man.: "I have a horse that took influenza about a year ago. After starting to get better, two little puffs came on each fore leg just above the fetlock. They caused him to be lame and were very sore when handled. I blistered them severely, the left leg got well and the puffs disappeared. But he has been very lame on the right leg all summer. The puffs still remain and he has got worse since the cold weather came. What is the trouble and can it be cured?"

Answer.—The synovial membrane of the fetlock joint is suffering from a rheumatic form of inflammation, and the swelling is the sac of the membrane distended with synovia. A cure will be difficult, but may be reached by careful and persistent treatment. Attend to the general health of the horse if he needs it; keep him in a warm stable and feed him well, but don't give him too much grain. Every day, and twice a day if possible, take a pail of hot water as hot as you can bear your hand in it, put his foot in it and keep it hot by adding a little hot water as required, for at least half an hour. Now dry the leg and rub in around the joint a little of the following ointment: Menthol, two drachms, potassium iodide, half an ounce, olive oil, two drachms, vaseline, four ounces. After rubbing in a little of the ointment apply a woollen bandage and let it remain until you bathe the leg again.

Navicular Disease.

R. C. R., Pilot Mound, Man.: "I have a horse 9 years old that has been lame on and off for four years in his front legs or feet. He is lame one day in one foot, in the other foot perhaps the next day. He is now more lame in the right front foot than in the left. When he first took lame he could hardly move along for the first two miles, he was so lame, but on the return would hardly show lameness. He stands with his feet out a little and prefers the toes low. When standing often bends one leg, resting the foot on the toe. He flinches when the foot is twisted sideways. Stumbles badly when he strikes his toe. Has been worked and driven hard, but has been always well cared for, well fed and is now in good heart. What can I do for him?"

Answer.—Your horse probably has chronic navicular disease and will not recover. There is an inflamed condition of the navicular bone and the flexor tendon passing over it. The locality of the diseased part is in the middle of the base of the foot, and as it is entirely within the hoof, our means of treating it are limited. We can place the foot in such a position that the inflamed parts will experience as much rest and as little strain as possible. This is accomplished by raising the heels a little, by lengthening the heel calks. The foot can also be kept cool by standing on an earth floor instead of plank. But beyond these measures, which are only palliative, there is little to be hoped for from any other treatment. The disease has a tendency to progress from bad to worse until the horse is so crippled as to be of no use. When this stage is reached, the animal may often be restored to usefulness by means of an operation known as neurectomy. This consists in dividing and removing part of the main nerves of the leg. This has no curative effect on the disease, but prevents the horse from feeling the pain of it any longer. Consequently the lameness disappears and the animal becomes useful again. The operation sometimes is followed by bad results, however, and therefore should only be performed on horses which otherwise are useless.

DR. WARNOCK'S ULCERKURE

THE MODERN HEALING
WONDER FOR

BARB-WIRE CUTS.

We received the following letter on Oct. 13 last—

Prairie Home Stock Farm,
Crystal City, Oct. 12, 1899.
WESTERN VETERINARY CO.,
Winnipeg.

Dear Sirs,—We have used S. Warnock's Ulcerkure in our horsestable this summer, and would not now be without it. It is the only preparation we have used which would heal up sore shoulders while the horses were working hard.

Yours truly, (Signed) JAS. YULE.

Ulcerkure will heal the worse forms of Scratches, Burns and Frost-bites. Good also for human Flesh. Large bottles, \$1.

BRANDON PUMP WORKS.

Elected over all COMPETITORS

and awarded the DIPLOMA
for the best exhibit of



PUMPS AND PUMP APPLIANCES

at the Brandon Exhibition, 1899. A good stock of Wood and Iron Pumps always on hand. Satisfaction guaranteed. Agent for Hayes' Force Pumps and Myers' Brass lined Cylinder Pumps. Address—

H. CATER, BRANDON MAN.

NOW THAT THE

CHRISTMAS RUSH IS OVER

We would again call
your attention to
our Watch Repairing
Department.

Andrew & Co.

WATCHMAKERS AND JEWELLERS,

McIntyre Block, WINNIPEG.



110 for 10 cents. This book contains one hundred and ten of the best humorous recitations, embracing the Negro, Yankee, Irish, and Dutch dialects, both in prose and verse, as well as humorous compositions of every kind and character. Sent postpaid for 10c.

Johnston & McFarlan, 71 Yonge St., Toronto.

The Age at Which to Work Colts.

P. L. P., Portage la Prairie, Man.: "At what age do you consider a colt fit for heavy work? Would it be safe to put a big strong team of colts just a little over three years old to work at steady ploughing or grading on the rail-road?"

Answer.—Theoretically a colt should not do heavy work until he is full grown or mature. This is when he has attained his full set of permanent teeth, and he is then usually between 4½ and 5 years old. Previous to this period his bones are immature and contain more animal matter and less mineral matter than adult bone. They are consequently more elastic in young animals than in old, but less able to stand compression or concussion. Hence a colt put to heavy work before maturity is in danger of injuring his young bones and becoming affected with splints, ringbones or spavins.

Practically it is difficult to say precisely at what age a colt should begin heavy work, as the answer to the question should depend upon the development and ability of the individual colt. At two years a colt should certainly do no heavy work, but if well grown is benefited by light work. At three the work may be a good deal heavier and ordinary plowing should be well within the capacity of a well grown team of colts. Railroad work is more trying and in filling the scraper in heavy soil or among stones the sudden and severe strains would be apt to injure a young colt. Much will depend on the judgment of the teamster, who should know enough to stop when the colts have had enough and not to push them to their own injury.

Out of Condition.

T. P. B., Bates, Man.: "I have a horse, 8 years old, weight 1,500 pounds, was in good condition and health when I bought him in April last. Was forced to house him in a damp stable and work him on wet land; the consequence was that he took distemper and strangles. I had to lay him off work for about ten days, when he got better of the distemper, but never recovered in condition and had a gleet from the nose for a long time. Have worked him moderately heavy all summer until about a month ago. Am now feeding well and he is doing nothing and still he fails to improve. In the early part of the season I fed pretty heavily of wheat. The horses' skin is apparently in good shape, being quite loose. He has a worried look about the eyes and displays a peculiar inclination to shake his head. Is always gaunt and never lies down for more than five minutes at a time, grunting and groaning while he is down and shaking his tail irritably as he gets up. He will sometimes lie down and get up this way three or four times in a half hour."

Answer.—The attack of distemper which your horse experienced has left behind it a sequel in the shape of pleuritic adhesions. In other words, the lung is partially grown attached to the chest wall, and consequently the general health is impaired, and pain is experienced on lying down. These adhesions may be partly broken up and removed by medical treatment. Give him twice a day one drachm of iodide of potassium. Continue for a week, then administer of Fowler's solution one half ounce three times a day for another week, and alternate the medicines in this way for a month. Feed liberally, keep him warm, and exercise him every day if possible.

Stifle Lameness—Indigestion.

R. S. V., Virden, Man.: "1. Mare, 13 years old, slipped and fell. When walking leg twists, turning on toe outwards. Not lame; stands all right. Stifle joint works outwards and seems loose. What can I do for her?"

"2. Horse, 8 years old, very high life. Put him on seed drill last spring with steadier horses; had to the him back, but he worried and got out of condition; failed so that we let him run in pasture most of summer, but he is not right yet. A journey to town and back seems to shake him up too much and he will stand with head down, not touching hay for a long time after reaching home. Sweats freely at jobs at which other horses never turn a hair; has no life; has a sunken and pained expression in the eye, long rough coat. Have fed him boiled barley, bran mashes and boiled flaxseed, but cannot get him in good condition. What is cause and cure? Have good hay and oats to feed him."

"3. Mare, 8 years old, lame in left fore foot. Stands with it slightly advanced and resting on toe; no inflammation or swelling, apparently nothing wrong to look at. Blistered shoulder last winter, but did not help her. Always lame, but more so after a road on hard road. Think it is in navicular joint, but am not sure. Please to state remedy, if any."

"4. Young mare, 6 years old, slipped on road while drawing wheat to town; fell heavily on left side. Hind leg on that side seems very sore; can scarcely walk. What treatment would you suggest?"

Answer.—1. An injury of this kind will not usually be permanent, and a sufficient rest will often be all that is required to set things right again. If the condition is continuing when you read this, apply a blister to the stifle.

2. This seems to be a case of indigestion and torpid liver. Prepare the horse for physic by

feeding on bran mash without hay for twelve hours and then administer a dose of aloes, seven or eight drachms, according to the size of the animal. While he is purging take notice whether he passes any worms or not. Worms are a frequent cause of malnutrition and, if present, call for appropriate treatment. After the physic has ceased operating, put the horse on his usual diet of hay and oats and give in each feed a tablespoonful of the following powder: Sulphate of iron, half pound; sulphate of soda and common salt, 1 pound of each; bicarbonate of soda, quarter pound. To be finely powdered or mixed together.

3. Probably navicular disease and incurable. Keep the heel high and the toe low and avoid road work for her, keeping her on soft ground as much as possible.

4. Foment the bruised part with hot water several times a day; afterwards rub in a little suitable liniment; such as Elliman's Embracation.

A Flourishing Institution.

Twenty years ago the Canadian Order of Foresters began doing business in the Province of Ontario, and in later years it has been enlarging its operations until now it has branches in every Province in the Dominion, having at the present time upwards of 34,000 members. During those years upwards of \$2,000,000 has been paid to the members and their dependents, and at the end of September last it had over \$802,000 of a reserve fund in its insurance department. The fees payable by policy holders, from which this surplus has been saved, after paying all death claims, are as follows, payable monthly in advance:

Between the Ages of	On \$500.	On \$1,000.	On \$1,500.	On \$2,000
18 to 25	35c	60c	90c	1 20
25 to 30	40c	65c	98c	1 30
30 to 35	45c	70c	\$1 05	1 40
35 to 40	50c	85c	1 28	1 70
40 to 45	55c	1 00	1 50	2 00

All the money received from the monthly insurance fees is placed into the Insurance Fund, and no portion of this fund or the interest accruing therefrom can be used for any purpose whatever other than the liquidation of death claim certificates. Not a fraction can be used for managing expenses.

The surplus funds are all invested in the Dominion of Canada in the very best class of securities. A Sick and Funeral Benefit Department is also conducted by the Order, which is an optional feature, in which upwards of 17,000 of the members are enrolled. The benefits are \$3.00 per week for the first two weeks' illness, and \$56 in any one year, and a funeral benefit of \$30.

The fees, payable monthly in advance, are as follows:

Between 18 and 25 years	25 cents.
Between 25 and 30 years	30 cents.
Between 30 and 35 years	35 cents.
Between 35 and 40 years	40 cents.
Between 40 and 45 years	45 cents.

The Society confines its operations to the Dominion of Canada, and all physically and morally qualified males between 18 and 45 years of age are accepted for membership.

For further information enquire of any of the officers or members of the Order, or address

THOS. WHITE,
High Secy., Brantford, Ont.
R. ELLIOTT,

H. C. R., Ingersoll, Ont.

Or Ernest Gartung, Brantford, Ont., or D. E. McKinnon, D.H.C.R., Winnipeg, Man., or Wm. Kirkland, D.H.S., Winnipeg, Man.

Wm. Patterson, Idyl Wild Farm, Birtle, Man., has an advertisement in this issue, offering three Shorthorn bulls for sale. He also has Brome grass seed.

Of Interest to Farmers who have Scrub to Remove.

My Patent Land Scrubber has been tested in all kinds of scrub during the past season throughout Manitoba and the Territories, as the unsolicited testimonials below will show.

These land scrubbers are made powerful enough to pull the heaviest scrub, and are guaranteed unbreakable, and will really last a lifetime.

One man with one team will remove as much scrub, root and branch, as five men will cut out, and will do it right.

No scrub plow needed after the scrubber has been used.

I am also building a power to operate the scrubber. One horse is all that is required, being equal to six with a six-inch roller, or by using a team and making the roller or shaft 12 inches in diameter, you will still have the same power, but will double the speed of the scrubber. The horse walks straight out, not in a circle. Every ten feet, six inches travelled by the horse draws the scrubber 18 or 36 inches forward, according to size of roller. Weight of power, about 400 pounds.

Correspondence solicited. All questions willingly answered.

Address,

A. E. BROWN,

Box 18.

Cartwright, Man., May 3, 1899.

A. E. Brown, Esq.: Dear Sir,—Please send me another Scrubber. I have sold the one you sent me, and the man who got it says he would not be without one, as it is a great success. Yours truly, J. P. McKibbin.

Maple Creek, N.W.T., July 10th, 1899.

A. E. Brown, Esq.: Dear Sir,—Your Scrubber, as ordered by me, came to hand some time ago. I am well pleased with it. It is all that you claim for it. Yours truly, Chas. McCarthy.

Agricola P. O., South Edmonton,

May 20th, 1899.

A. E. Brown: Dear Sir,—Scrubber pleased O. K. I gave it a trial and am well pleased with the way it handles the scrub. The scrub here is very large. Yours truly, Chas. Armatage.

**BARLEY
WANTED.**

We are now in the market for

GOOD BREWING BARLEY

Farmers threshing early will do well to forward us samples.

**EDWARD L. DREWRY,
Redwood Factories, WINNIPEG.****DON'T MISS THIS!**

These Trees will Grow.

I have this year an exceptionally good stock of FRUIT BEARING PLANTS AND TREE SEEDLINGS, and offer for fall delivery Strong Seedling Trees at \$5.00 per 1000, or

A Collection for \$5.00

To consist of 100 maple or cottonwood seedlings, 100 southernwood or willow cuttings, for hedges, 100 raspberry (4 var.), 25 currant and gooseberry (4 var.), 6 rhubarb. The fruits are bearing sizes and the varieties the best suited to the climate.

H. L. PATMORE, Brandon, Man.

**Cultivated Farm,
CHEESE AND BUTTER FACTORY.**

For sale near Silver Plains, Man., on N. P. Ry., about one mile from station, 24 miles from Winnipeg. Everything in good order. For particulars write—

John S. Campbell, Morris, Man.

When writing advertisers, kindly mention The Nor'-West Farmer.



Dairy Convention.

The annual convention of the Manitoba Dairy Association has been arranged for Feb. 20th, with a union meeting with the Live Stock Associations on the evening of the 21st. A good programme is being prepared. Interesting, helpful addresses are expected on all branches of dairy work. Tickets can be had for single fare for the round trip in connection with the bonspiel, and will be sold up to the February 19.

North-West Creameries—Some Dairy Problems.

By J. W. Mitchell, B. A., Supt. Eastern Division of Northwest Creameries.

A general statement of the results of the past season's work in the creameries of the Territories will no doubt interest many of the readers of *The Farmer*. The creameries are divided into two divisions—the western division, including those in Alberta (with one in Assiniboia) and the eastern division, including those in Saskatchewan and Assiniboia. The combined output of the creameries in the two divisions for the season of 1899 was over 500,000 pounds of butter, which was pretty equally divided between the two divisions—that of the eastern division, with which the writer is connected, being 252,500 pounds.

The butter of both divisions was practically all marketed in British Columbia at excellent prices. There was a great demand for our goods, and we had to refuse several large orders. In the eastern division the butter will net an average price of between 20 and 21 cents at the creameries, which is much better than for any previous year.

We have not received a single complaint from any of the buyers during the entire season, which speaks well for the quality of our product. The cream received during the past season was on the whole, quite satisfactory; our butter makers did excellent work, and we have good plants and a fine class of refrigerators in all the creameries. We take the precaution to whitewash the refrigerators every spring (using fresh lime), and are able to hold the temperature down to about 32° F. during the warmest weather, with the result that the atmosphere keeps pure, sweet and dry, while the butter retains its good flavor until shipped and shows no traces of mould. The refrigerators are insulated—floor, walls and ceiling—with lumber, paper and dead air spaces, and they are cooled by means of a freezing mixture of broken ice and salt. This mixture is put into large galvanized iron cylinders, 12 to 14 inches in diameter, which are open at the bottom and stand in a trough near the floor, and pass through the ceiling, being filled from above. The cylinders are kept so cold by this mixture that all the surplus moisture in the room collects in them as the air circulates, and forms ice which sparkles like the frost on a window pane in winter. Thus these ice cylinders serve the double purpose of cooling the room and preventing dampness.

Our dairy industry has met with a good measure of success during the short time that creameries have been in existence in

the Territories—just since the spring of 1897 in any but an experimental way—which is both gratifying and encouraging to all interested in its development. But there is one defective feature about it, by remedying which we can easily double the output of our creameries, and that is, we are running our creameries entirely too short a season. At present we are unable to run more than about five months in the year, and during the opening and closing portions of this short season the make is light, and the poor care that our cattle receive during the winter, and again during the fall, is the cause of the shortness of the season. The remedy rests with the creamery patrons; if they will but feed their cattle generously with good, wholesome, palatable food, and house them comfortably during winter, and again, if, when

the fall comes on, they stable their cows during the cold nights and occasional storms, and feed them a little to supplement the failing pastures, we can easily lengthen the creamery season to seven or eight months—by opening earlier and running later—with a good make throughout the season. A longer season, with a larger make throughout, would go far towards crowning the success of our creameries.

At present the foods most commonly fed our cattle during the winter are slough hay and straw. I shall enumerate some of the foods that can be grown or procured for fall and winter feeding. They are sheaf oats, Brome and rye grasses, such roots as carrots, mangels, beets and turnips (the last for cattle not in milk, reserving enough of the others for the milking cows); the

Manitoba Dairy School.

185 THISTLE ST., WINNIPEG, MAN.

Opposite Portage Avenue.

The Fifth Session of the Manitoba Government Dairy School will open with the Home Dairy Course on Jan. 8, 1900, and continue until Feb. 3.

The Second Home Dairy Course opens Feb. 5, 1900, and continues until Mar. 3.

The Third Home Dairy Course opens Mar. 5, 1900, and continues until Mar. 31.

The Butter and Cheese-makers' Course opens on Feb. 5 and continues until Mar. 31.

A competent corps of instructors will give both theoretical and practical instruction in Cheese Making, Butter Making, Cream Separating, Preparation of Starters, Milk Testing, and all branches of the Dairy industry.

The School is a free gift to the residents of the Province of Manitoba, and is for the purpose of encouraging one of the greatest industries in the Dominion of Canada.

Write for circulars of information and application blanks to—

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Dairy Superintendent.

WINNIPEG, MAN.

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CAPACITY.	
No. 0.	Churns from 6 gl.
1.	1/2 to 3 gl. cream
2.	1 to 5 "
3.	2 to 7 "
4.	3 to 9 "
5.	4 to 12 "
6.	6 to 14 "
7.	8 to 20 "

Canadian Dairy Supply Co.
236 King Street,
WINNIPEG.
Agents Manitoba
and the Territories.



coarse grains, chopped, with which we may include bran. Here, certainly, is a great variety of good foods, and no one will dispute the fact that they can be grown most successfully.

Not only should a farmer lay in a good supply of the necessary foods for the fall and winter feeding of his stock, but he should aim to feed these foods to the best advantage. To do this, he must study, to some extent, their composition. Passing over the water and mineral matter of foods—both of which are essential constituents, the one to make food sufficiently succulent, palatable and digestible, and the other to supply substance for bone tissue—the main substances of all foods may be classified into two groups, according to the function they perform.

1. Heat and energy producing substances. This class includes the fats and carbohydrates (starch, sugar, etc.) of foods. We group fats and carbohydrates together because they are composed of the same elements (carbon, hydrogen and oxygen), and serve the same purpose as foods, namely, to keep up the fire of life, supply energy, and form fat; but a pound of fat is equal, in feeding value, to about two and a quarter pounds of carbohydrates,

and carbohydrates in the proper ratio to each other it is called a *balanced ration*. Extended and careful experiments have proven that on the average a cow in milk requires, for each 1,000 pounds live weight, between 2 and 3 (average 2½) pounds of digestible protein, and between 12 and 15 pounds of digestible carbohydrates per day; hence, a balanced ration contains about one pound of digestible protein to between 5 and 6 of carbohydrates.

A balanced ration, however, is not sufficient in itself. The food also requires to be succulent—especially for milch cows—and to be digestible, palatable and not too concentrated. A ration, to be not too concentrated, must contain about 25 pounds of dry matter, that is, were the water evaporated from it, it would weigh about 25 pounds. Furthermore, the individuality of the cow must be studied. Some cows can profitably consume much more food than others. Another point that must be considered is the cost of the different foods; what might be the most economical ration this year might not prove so next. Again, one must consider the quantities of the different foods he has on hand. There are times when a ration not perfectly balanced may be the cheapest. We cannot

is as much in *selection* as breed, that is, in keeping the best cows and raising calves from them to replace the poorer cows. Judicious selection and breeding should be combined.

Feeding, care, selection, weeding and breeding would form an excellent motto for dairymen; but care and feeding must come first, since it is impossible to properly estimate a cow's ability as a dairy animal until she is comfortably housed, kindly treated and well fed—and I would add that *regularity* in feeding and milking are very essential. To assist him in his work, and make it more interesting, pleasant and profitable, every dairymen should subscribe for a couple of good farm journals, and obtain a few of the best standard works on dairy.

A Useful Hand Book.

The R. A. Lister Co., Winnipeg, Man., and Dursley, England, manufacturers of the Alexandra and Melotte cream separators, have issued a neat little pamphlet called the "Farmers' Dairy Hand Book." It is a hand book of information on dairy topics, treating of the best way to handle milk, cream and butter; in fact, every phase of dairy work is explained, from the composition of the fat to the packing of it as butter. Useful information is given as to the best treatment of dairy cows. Instructions are given about how to use the Babcock tester and the oil test churn for use in creameries. In the back of the book pages are arranged for a monthly account of the number of cows milking, amount of milk given and the amount of butter made, sold and used. This little book is well illustrated and should be in every home.

J. A. McFeeeters, maker until September last at the Churchbridge creamery, is now instructor in milk testing at the Guelph dairy school.

The Government Dairy School has been opened with nearly 20 pupils and the prospect of a good season's usefulness. Dairy Commissioner Murray gives his first lecture in the dairy school, Thistle street, on January 8th.

There has been an increase of 50 per cent. in the number of dealers licensed to sell oleo in the U. S. within the past year. There are now close on 7,000 retail dealers and 155 wholesalers. A great majority of the States have laws prohibiting the sale of oleo colored to look like butter, but as all oleo is so colored, the law is practically set at defiance. The increase in the manufacture of oleo is—from 57,516,000 lbs., in 1898, to 83,141,000, in 1899. A still further expansion of the oleo business is expected in the present year. Four States, California, Montana, Nevada, and Utah have no stores licensed to sell oleo, while Illinois leads with over 2,000.

F. W. Ferguson, butter maker at Churchbridge, Assa., for the latter part of the past season, speaks quite enthusiastically of the future of the dairy business there. From a recent interview with him we note that the creamery was operated until October 21st, making for the season between 31,000 and 32,000 lbs. of butter, and scoring about a ton as a maximum make for one week. This, considering that the creamery is only in its second year, is certainly quite gratifying. The population about Churchbridge is a mixed one and includes, besides one or two good settlements of Canadians and a number of Scotch, a lot of Icelanders. These latter, Mr. Ferguson finds, make splendid dairy-men and are doing well. A large increase is looked for during next season.



Central Creamery, Portage la Prairie, Man.

J. Bousfield & Co., proprietors of the North Brandon, Portage and Strathclair Creameries have had another very successful season. This makes six seasons that this firm have devoted their whole time to creamery work. The same ground will be worked next season, together with one or two other creameries which the firm have been asked to operate. The plan worked on is to operate the outside points for a short season, while the spring and fall cream is shipped to the Central Creamery at Portage la Prairie. The past season's make has been larger than that of any former year, being 79,000 lbs. The Creamery closed with the end of the year, to begin again in March.

as it will supply this many times as much heat and energy. It is the custom, when calculating the feeding value of any given food, to convert the digestible fats in it into their equivalent of carbohydrates by multiplying their weight by two and a quarter.

2. Muscle and flesh forming substances. These are most commonly known as protein, but also as "proteids" or "albuminoids." Protein is much more complicated in structure and composition than the carbohydrates and fats, and in addition to carbon, hydrogen and oxygen, contains, as an essential constituent, nitrogen. Protein goes to form muscle, flesh, milk, hair, etc. It will also act as a heat former, but it is too expensive a substance to use for this purpose.

Some foods are very rich in carbohydrates and poor in protein, while others are rich in protein and poor in carbohydrates; and if feeding is done in such a way as to give an animal an excess of either, it only results in waste, and it is the aim of the skilful feeder to avoid this by balancing up his foods properly. By the term *ration* is meant the different kinds of foods, and the amount of each, given an animal per day, for each 1,000 pounds of live weight; and when this food contains digestible protein

dwell further upon the feeding problem, but we trust that enough has been said to show what an important problem it is.

The intelligent dairymen knows the importance of looking to the comforts of his cattle, and will treat them kindly and provide a warm, comfortable stable for them. A cow that is cruelly treated will waste an immensity of energy through excitement and fretting. Again, a large portion of the food consumed by an animal in a cold stable goes to generate heat which rapidly passes off to warm the atmosphere of the stable and the surrounding country, no doubt a kind act towards one's neighbors in cold weather, but unkind to the poor cow, which will not fail to take revenge by cutting down her owner's profits.

A dairy farmer should study every cow in his herd, and know just how profitable each is to him. He can then begin intelligently to weed out the unprofitable ones, and through careful selection and breeding build up a fine dairy herd. I would say that what is wanted in Manitoba and the Territories is a dual purpose animal, that is, one which is suitable for either beef or dairy purposes, and a cross between the Shorthorn or Shorthorn grade and some suitable dairy breed, as the Ayrshire, ought to give a fine type of animal. But there

Skimmings.

It is a good plan to break the calves to lead, as it will save much hard work in after years.

The dairyman who applies his energies faithfully to his business has the least to say about hard times.

Regularity in milking, to prove profitable, must be observed not only by the week or month but by the year.

When butter comes in its most perfect condition the globules of fat are in a liquid state just previous.

The Rapid City creamery made 72,000 lbs. of butter during the past season. This is 22,000 lbs. more than was made the previous year.

The dairyman who has an educated conscience and heeds it will not allow dirt to sift into the open top of the milkpail and then strain it through the funnel.

D. A. Macpherson, the cheese king of Canada, shipped six cheeses to England, which weighed 1,000 pounds each, for exhibition at the London dairy show.

It is estimated that 4,300,000 cows would be necessary to produce an amount of butter equal to the quantity of oleomargarine manufactured and used in the United States.

"THE FARMER" BRINGS RESULTS.

Winnipeg, Jan. 3rd, 1900.

THE NOR'-WEST FARMER,
Winnipeg.

Dear Sirs,

Please leave our advt. out of your issue of 5th inst., as the one in your last is bringing us so many enquiries we cannot answer them all on receipt, and we must have an opportunity of catching up. We shall have something to submit to your readers in the 20th January number.

Yours truly,

R. A. LISTER & CO., Ltd.

W.M. SCOTT,
Manager.

C. Marker, superintendent western division of the government's Northwest creameries, will address conventions in Vancouver and Victoria, B. C., some time during the early part of January.

The dairyman who has faith in his vocation and makes money from it is not afraid to invest his profits in improvements of farm and cattle that will yield him compound interest.

The Newdale creamery closed last month after a successful season, the output amounting to over 77,000 pounds. W. J. Crowe, the butter maker, has gone to Ontario to take another course at the Agricultural College, Guelph.

The Fairplay creamery, Pilot Mound, Man., was so much helped by the local dairy convention held there last spring, under the auspices of the Dairy Association, that the directors, at their annual meeting, donated \$5 to the funds of the association. They have had a most successful season.

The record being made by the Minnedosa creamery under the present owner, H. C. Neilson, is very gratifying. The past season he made from April 15th to October 22nd, being stopped by the early snow storm. The make for the season was 50,000 lbs. against 35,000 lbs. the season before and 21,000 lbs. in 1897. Thus it will be seen that the business increased to nearly two and a half times its volume in two years.

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- It is the easiest turned
- It is the quickest cleaned
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Be certain that in any contract which you sign you reserve absolutely the right, before acceptance of any other machine, to try a SHARPLES TUBULAR SEPARATOR side by side with it, and to accept only the one which best pleases you.

Always write us when you contemplate buying a Cream Separator, so that you may receive our proposition. Even though you do not wish a Sharples Separator, we may be able to save you money on the machine you do wish.

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Are sold on a clean contract.

If you wish, write it just like this:



"Please ship to me a Sharples Tubular Separator. I will immediately put it into my factory, and will give it a fair and careful trial. If I like it in every respect, and it does all claimed for it, I will keep and pay for it. If it fails to suit me for any reason, I will notify you to that effect, and on receipt of instructions from you will re-ship to your order as you may direct."

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See our Clubbing List Page 30 this Issue

THE NOR'-WEST FARMER

ISSUED TWICE A MONTH.

ESTABLISHED 1882.

The Only Agricultural Paper Printed in Canada between Lake Superior and the Pacific Coast, and issued on the 5th and 20th of each month.

THE STOVEL COMPANY, PROPRIETORS.

CORNER McDERMOT AVE. AND ARTHUR ST.
WINNIPEG. MANITOBA.

Subscription to Canada or the U.S., \$1 a year, in advance. To Great Britain, \$1.25 (5s. sterling).

Agents wanted to canvass in every locality, to whom liberal commissions will be given.

ADVERTISING RATES.

Transient advertisements, for less than three months, 15c. a line (each insertion). Terms for longer periods on application.

All advertisements estimated on the Nonpareil line—12 line to an inch. A column contains 128 lines.

Copy for changes in advertisements should be sent in not later than the 27th and 14th of the month to ensure classified location in the next issue. Copy for new advertisements should reach the office by the 30th and 17th of each month.

TO OUR SUBSCRIBERS.

It is the intention of the publishers of this paper to admit into their columns none but reliable advertisers, and we believe that all the advertisements in this paper are from such parties. If subscribers find any of them to be otherwise, we will esteem it a favor if they will advise us, and we will at any time give our personal attention to any complaints which we receive. Always mention this paper when answering advertisements, as advertisers often advertise different things in several papers.

LETTERS.

Either on business or editorial matters, should be addressed simply "The Nor'-West Farmer, P.O. Box 1310, Winnipeg," and not to any individual.

Look at Your Subscription Label.

When you pay your subscription, watch the name label on the next two issues which you receive. On the first issue following payment, it might not give the correct date—the typesetting machine may make an error and the proof not be corrected before mailing day. But if the date is not correct on the second issue please notify us by postal card.

Look at the date label now. Are you in arrears? Are you "paid up" to the end of 1900? The label will tell you. If in arrears, please renew promptly.

Subscribers who miss any of the issues of "THE NOR'-WEST FARMER" should drop us a card at once and secure same, as we want every subscriber to get **every copy**. Do not delay in sending, as our supply of extras sometimes becomes quickly exhausted.

WINNIPEG, JANUARY 5, 1900



OUR ILLUSTRATED PREMIUM.

With this issue of The Nor'-West Farmer we present our subscribers with a photo-engraving of Field Marshal Lord Roberts of Kandahar, the Commander-in-Chief of the British Army in South Africa. Being printed on heavy coated paper, this engraving is suitable for framing, and should find a prominent place in many a western home. We trust it will be preserved, for it is the companion picture of a series regarding which we may have a proposition to submit to our paid-up subscribers in the near future. In the meantime we believe this timely supplement will be appreciated by every patriotic

Western Canadian, as it is a faithful representation of Great Britain's most popular commander, who has again been called to the front at a most critical period in the history of the Empire.

DELORAIN AND SHOAL LAKE SUBSCRIBERS.

The Farmer is in receipt of a letter from Deloraine, written Dec. 22, 1899, enclosing a postal note for \$1.50, dated Dec. 29, to pay for The Nor'-West Farmer and Weekly Free Press. The sender has forgotten to sign his name.

Also one from Shoal Lake, which contained a postal note for \$2.50, dated Jan. 3, 1900, subscribing for The Farmer and Weekly Tribune. At bottom of letter the remitter says: "My last address was Shoal Lake, new address Oakburn." He also has not signed his name.

We would thank these parties to forward their names to us at once, when their date labels will be changed and the papers ordered will be sent them.

The Farmer has received several letters lately, in which the remitter has neglected sending his name (all of which, with the exception of the above, have been traced to the proper parties), and we would urge our subscribers to be more careful in this regard, as it puts us to a great deal of trouble and causes delay.

We would also draw the attention of all subscribers to the fact that when they change their post office address, we should be notified, giving the old address as well as the new.

RETROSPECT AND PROSPECT.

In the slack seasons of his business every man of correct business habits takes stock in one way or another. And if he is at all thorough in his stock-raising he will find out which part of his business pays and which does not. One year's experience may be an imperfect guide, for conditions outside of his control may help or hinder. But if he is really fit to manage his business he will by such a retrospective review get a pretty fair idea of the lines along which most money can be made year after year. Farming is a business and ought to be conducted on business principles. This is just the season to spend a day or two of leisure time in reviewing our last year's work, taking stock of the lines of action from which we derived most profit, as well as those it would be better for us to avoid in the future. If we have the useful faculty of learning from the experience of those around us, as well as from our own, that review will be a great help to us when we set about planning the operations of the coming season.

The man who has little or no forethought, whose wits get into a placid doze whenever there is no special pressure of work to keep them awake, is bound to be something less, and as a rule a great deal less, than the success which every one with wholesome ambition will strive to attain to. At this season when vegetation is dead asleep, there is no reason why the farmer should not have an easy time of it, too; but that easy time is just the fittest opportunity for doing a fair share of profitable thinking and planning, finding in the successes and failures of the season, now gone forever, valuable pointers for the busy season that will in due time come. Free discussion with a few live neighbors, judicious reading along the line of our business, and attendance at such institute meetings as may be within our reach, are all valuable opportunities for freshening our mental faculties and

raising our farming operations as far as possible above the level of mere drudgery. One of the surest preparations for pleasant and profitable action is to do now all the live thinking and planning we possibly can.

ENCOURAGEMENT OF SWINE.

In a speech delivered at the banquet of the Grenfell Agricultural Society, Mr. Bulyea, the Commissioner of Agriculture for the Territories, intimated that his department were completing arrangements with the Canadian Pacific Railway Company, the Calgary & Edmonton Land Corporation and the Ontario Government, whereby substantial assistance would be given the farmers along the C. & E. R. with a view to inducing them to engage more extensively in the growing of pork.

Past years have witnessed most anomalous proceedings in Northern Alberta with respect to the swine industry. An excellent market exists at the very front door of Alberta for every pound of ham and bacon which can be produced in that portion of the Territories for many years to come. The mining camps of British Columbia require it all. Pork packing establishments in Edmonton and Calgary have been ready to purchase any number of hogs at fair prices, usually the Winnipeg price with freight added, and they actually had to import the bulk of their live hogs from Ontario and the Province of Manitoba in order to keep their factories running. Now comes the curious feature of this position of affairs. Large quantities of coarse grains are annually shipped out of the country for which the farmers, as a rule receive much lower prices than obtain in Manitoba and Ontario.

The experience of the past season should certainly have taught the farmers of Central and Northern Alberta, that there is safety in putting their trust in hogs. Large quantities of injured, unsaleable grain is now on the hands of the farmers there and the problem is what is to be done with it?

The business of pork raising is not one which can be taken up and discarded at pleasure. Suitable accommodation is indispensable in order to make a success of it, both in the way of pens and pasture and upon the possession of well-bred and profitable breeding stock, almost everything depends. During favorable seasons, the Alberta farmers have in the past preferred to sell their grain rather than feed it, on the plea that "there is no money in hogs," and when the lean year comes along with its unmarketable grain, a frantic rush is made for store hogs and the grain is "converted" into pork by means of a self-feeder, placed on the leeside of a straw stack, and with the valuable assistance of half a dozen "Arkansas rail-splitters," whose breeding and early training have apparently developed the qualities requisite to success upon the race track at the expense of those necessary for satisfactory performance in the fattening pen. The inevitable result is failure with a big F, and as long as such methods are continued, nothing but disappointment will be reaped.

The Farmer learns that the plan which will be adopted by the Regina authorities is somewhat as follows: Two or three carloads of high grade, selected brood hogs, due to farrow in April and May, will be purchased in Ontario under an arrangement with the government of that Province. It is also possible that a limited number of thoroughbred boars will be procured. It is understood that the C.P.R. company has granted free transportation for this shipment to Alberta. The consignment will be distributed along the Edmonton line from Calgary north and sold by public auction to the highest bidders, subject to an upset price of the actual av-

Supplement to The Nor'-West Farmer.



FIELD-MARSHAL LORD ROBERTS OF KANDAHAR, V.C. K.P.'&c.

Commander-in-Chief of the Army in South Africa.

verage cost in Ontario for each animal. No person will be allowed to purchase more than two hogs and one boar, and will have to sign a simple form of agreement, in which he binds himself not to kill or dispose of any hog so purchased, without the permission of the Department of Agriculture at Regina, for a period of two years from date of purchase.

It is further learned that any loss sustained by the Territorial Government in carrying out the above scheme for the encouragement of hog raising in Central and Northern Alberta will be reimbursed by the Calgary & Edmonton Land Grant Corporation.

This is a very satisfactory class of work, which will injure no one and at the same time result in great benefit to western farmers. The hog industry ought, by reason of abundant natural advantages, to be a leading one in Alberta. Water, pasture, building and fencing material are available in plenty and enormous crops of barley can be grown without the slightest risk in any ordinary year. The Farmer wishes the Territorial Government every success in its laudable efforts and trusts that the farmers whom it is sought to benefit will take this opportunity of securing first-class brood hogs, and once having become possessed of such valuable and productive property, that they will under no circumstances part with it, but embark in hog raising with a firm determination to stay.

HAIL INSURANCE OUTLOOK.

The half-dozen enterprising foreigners who came here last spring to give us pointers in the art and mystery of hail insurance, have finished their job, and, in our humble opinion, have done it very neatly. While the few members of the society who came in to the annual meeting to relieve them of their duties, were showing their proxies, the directors were arranging with certain lawyers for the payment of the balance of the \$32,000 they charged us for the insight we now possess as to the style in which clever Yankees build up a business at short notice. One of those directors was good enough to say — after he had made sure that the payment given for the services of their agents was to come all out of our pockets and none of it out of his own — that the scoundrels who had been brought here as canvassers were fit for the penitentiary. Of course, the men who employed them are still eminently respectable American citizens.

Our farmers have paid through the nose for their misplaced confidence in fair-spoken strangers, and the question now to be dealt with is the possibility of carrying on the business on a more reliable basis. The farmers now on the directorate are entirely free from all blame for the misdeeds of their predecessors. They have since their election issued a call on unpaid members of 2½ per cent. instead of the 5 per cent. formerly asked for. Out of the proceeds of this levy they propose to pay off all unsettled claims for hail losses and also refund to those who have already paid the excess charges made by the old directors. That being done, they propose to continue the business with the support of all who adhere to them.

The Farmer has up to this time strongly advised resistance to the levies previously made. But it is most likely that the call now made is legal and can be enforced. This point can be soon settled in the law courts. If the right of the new directors to enforce their claims is upheld by the judges, their collection, by legal means if necessary, can be enforced, and further resistance would be foolish.

Till something better is brought forward mutual hail insurance will always be a de-

sirable scheme, and now that so much money has been spent on it, the Manitoba Farmers' Mutual may yet be turned to good account and prove useful for years to come. Why should it not have a fair chance to prove its fitness for such service?

We have since been informed that being averse to extreme measures the directors appeal in the meantime to the good sense of the outstanding members to fall in with their scheme of settlement, which seems very fair in the circumstances. We hope in our next issue to be able to report progress along this line.

THE COLLEGE AND THE FARM.

The southwestern counties of Scotland have, through their county councils, arranged for an agricultural college, and have already arranged for courses of lectures and laboratory instruction of a plain, practical character and suited in the meantime quite as much for actual farmers as for youthful students. In his opening address, Prof. Wright put the relation of the college to the farmer in a very clear light. He says it is quite a mistake to imagine that by this new invention we will be able to turn out the ideal farmer of the future. The very best of the teachers and lecturers on agriculture, both in Britain and elsewhere, have learned the solid rudiments of what they know and teach on the farm itself. The college type of agricultural professor is inferior to the average good farmer in the actual work of the farm, and farm students could learn a good deal more along some lines on the farm at home than on the college farm. The college alone cannot make a farmer.

The best system of agricultural education is, undoubtedly to have first, two years on a farm, and the second two years at the agricultural college — the true relation of the college and the farm being that the college, like our universities, forms the seat and centre of the higher learning, and the farm as the board school which gives the absolutely essential elements of knowledge.

Any other way than the line indicated by Prof. Wright could only bring the pretensions of the college to ridicule, but it is not every professor who can see it in that light.

A PITCH HOLE JUDGMENT.

A case of great interest to all rural municipalities has just been decided by the full court at Winnipeg. Kennedy sued the Rural Municipality of Portage la Prairie to recover damages for injuries his horse sustained on one of the principal roads leading into the town. He alleged that there were 10 or 12 pitch holes in the road all within a few feet of each other, and that owing to the depth of snow at the side of the road it was impossible to travel anywhere but over the road. The case was tried before Judge Ryan, who held that it was the duty of the municipality to keep their roads in repair, and as they had not done so they should be held to be liable for the accident complained of. Against a verdict in favor of the plaintiff for \$75 damages the defendant appealed. Judgments were delivered by Chief Justice Kilham and Mr. Justice Dubuc that the defendants were liable and the appeal should be dismissed with costs, Mr. Justice Bain dissenting.

Years ago The Farmer drew attention to the culpable indifference of pathmasters in the matter of pitch holes, and though the ruling above given looks rather severe, it will furnish a much-needed lesson to some easygoing rural officials.

Another judgment by the full court may be here referred to. The Rockwood Agri-

cultural Society wanted to give a mortgage on their new grounds as security for a loan for purposes of improvement. The District Registrar held that they had not the power to mortgage and refused to register. An appeal was made to the full court and judgment was given sustaining the registrar. The court held that the Act gives no express power to borrow money for such a purpose.

—Don't find fault with what other people do, or the way they do their work, if you are not certain you have a better way.

—The Table of Contents of The Nor'-West Farmer for the year 1899 is sent out with this number. Bind it up with your issues for the year. We have a neat and handy Binder, which we will send to all subscribers upon receipt of 30 cents. Or we will send it to any old subscriber who sends us the name of a new subscriber, together with \$1.00.

—The Farmer is in receipt of thousands of letters from subscribers, stating how much they appreciate the paper. We are pleased to know that we are putting out a paper that deserves such praise, and it is the publishers' intention to make the issues of 1900 even more interesting. There are still several who have not sent us their renewals for 1900. We would thank these to kindly send in at once, so that it will not be necessary to drop their names from our list.

—Some time ago Prof. J. W. Robertson announced that through the generosity of Sir W. C. Macdonald, of Montreal, \$10,000 had been placed at his disposal for the establishment of manual training schools in Canada. Prof. Robertson has engaged a well-known Scottish expert, Jerome Wallace, to come to Canada and take charge of the work of manual training in the Ottawa schools. Other experts are being engaged for other centres. It is understood that Winnipeg is to be one of the centres at which this work will be started.

—Germany has been trying to shut out American products, particularly meats, of which she needs a large supply. Now comes the statement by Baron Von der Goltz that Germany cannot produce all the food required, and that from one-eighth to one-seventh of the grain required must be imported, and this, too, after all the teachings of her numerous agricultural colleges and experiment stations. She is, however, recognizing the inevitable and has sent inspectors to examine the live stock as it is killed at the large American abattoirs.

—One of the most pleasing features of the recent municipal elections is the fact that nearly every one of the previous office-holders has been returned, usually by large majorities. Sometimes a change is desirable, there may have been a mistake made about the value of the previous appointee. But this last election goes to prove that the right men have found their way to the front and did so well that their constituents wanted to keep them there. Show that you are up-to-date in fitness, and you will find little call for canvassing the next time your seat is open to a contest.

—A gradual change is taking place on all the leading railroads. The cost of transportation is being reduced through economy in the use of fuel and by the lengthening of trains whereby a single engine without additional cost for train ser-

vice can draw as much as 50 per cent. additional freight through the use of heavier steel rails, the substitution of iron for wooden bridges, stone masonry for earth embankments, automatic brakes for those operated by hand, stone for earth ballast, and the gradual abolition of grade crossings. Long freight trains are no more difficult to handle than short ones, provided always that the capacity of the locomotive is not overtaxed, that the roadbed is in good condition, and that the gradients are not too steep.

Draft of Weeds Upon Soils.

By Prof. H. Snyder, Minnesota Experiment Station.

Weeds are getting by far too strong a foothold in some districts. It is not alone the damage which they do in displacing good grain that makes their destruction imperative. The plant food and water they require is no small matter and if continued year after year they make a heavy drain on the soil's fertility. Just how heavy that drain is Professor Snyder, of the Minnesota Experiment Station, tells in a recent article in the St. Paul Farmer. It is so good that we reproduce it as follows:

When weeds take possession of the land and prevent a normal yield of grain, the loss incurred is generally reckoned by the decrease of the yield per acre of the grain. The loss in yield is not the only loss. Weeds rob the soil of fertility. When a poor stand of grain, and a good crop of mustard, pigeon grass, or some other weeds are harvested, the soil is robbed of more fertility than if a heavy crop of wheat were removed. This fact may be verified by the following table, which gives the pounds of the three main plant food elements per ton of material:

	Nitro-	Phos.	Pot-	gen.	acid.	ash.	lbs.	lbs.	lbs.
Wheat, 20 bus. with straw	35	20	35						
Russian thistle	40	15	65						
Mustard	65	26	37						
Pigeon grass	30	20	45						
Wild barley	40	20	40						

These figures show that a crop of wild mustard removes more potash and phosphoric acid, and nearly twice as much nitrogen from the soil as is contained in an average yield of wheat.

Wheat and small grains are generally considered "hard on the land," but the fact is that weeds are a great deal harder. Why then, if weeds take so much fertility from the soil, is it possible for them to grow year after year? They are able to grow because they are strong feeding plants, and are capable of subsisting upon complex forms of food that are unsuitable for weaker feeding crops, as wheat or flax. When one crop of weeds takes from the soil all the food that it can, another and a stronger crop is ready to begin, making a sort of rotation of weed crops. Weeds also take from the soil the available food which should contribute to the growth of the grain. When weeds are allowed to get possession of the soil, they rob the crop of all the best forms of plant food, and a poor yield of grain and a heavy yield of weeds results. The weaker feeding grain is compelled to compete against the stronger feeding weeds, and the result is survival of the stronger. Our thin, over-grain cropped soils are annually robbed of more fertility by weeds than by the grains that are grown. The strong feeding powers and fertility of some weeds may be observed during a dry season, when the weeds often continue to grow while crops suffer. Observe an old thin meadow or pasture. Dandelions are green while clo-

ver and timothy and other grasses are parched. This is because the weed is the deeper rooted and the stronger forager. Not only is the soil depleted of its fertility by weeds, but a heavy loss of moisture occurs. The water which the weeds extract from the soil rightfully belongs to the struggling crop.

If the fertility removed in a crop of weedy flax or wheat were calculated on a commercial basis, it would cost \$10.24 to replace the fertility removed by every ton of wild mustard! This may seem extravagant, but nitrogen in commercial forms costs at least 12 cents a pound, and potash and phosphoric acid at least 4 cents a pound. These are the same prices which eastern and southern farms pay for their commercial fertilizers, and they annually purchase from fifty to sixty millions of dollars' worth of these plant food compounds, while western farms are robbed to the same extent by weeds. The plant food assimilated by weeds is just so much fertility lost from the soil, because the weeds are harvested with the grain and sold from the farm, or rather given away as dockage.

The condition of a farm can generally be determined by the weeds that are grown; in fact, weeds tell the character of a soil better than does the table of contents that of a book. In alkaline soils weeds of a certain character always predominate, while on acid soils a different class of weeds is found.

While weeds are objectionable in many ways, as decreasing the yield of grain, exhausting the soil moisture, and causing dockage when the grain is sold, the greatest damage which they cause is depleting the soil of its fertility. A weed should be looked upon as a robber.

The Value of Paint.

I have no paint to sell or axe to grind, and I'll never tell you the best brand that is offered for sale, but will say from personal experience that it pays to paint farm wagons, sleighs, etc., that are outside in all weathers. It will pay good interest to paint them every three or four years with linseed oil and lead paint. And now that you can get it all ready to put on, it is no trick at all for a handy man or boy to paint all the implements outside in summer or in a warm place in freezing weather. We have no doubt been told about this very frequently, but require reminding of it, as the farmer has so many things to engage his attention that he is apt to neglect it, and it seems too putting a job, many think, to bother with, and so it gets put off for a more convenient time and thereby gets neglected altogether. The paint on your wagon may look all right, except the rims. Look at them and see if they do not require some, and it will pay you to paint them; and your sleigh runners are likely bare, paint them while you are at it.—J. U. P., in Pilot Mound Sentinel.

Agriculture in the West Indies.

The West Indies have now a Department of Agriculture established by the British Government. According to a recent bulletin the object of this department is to try and find a way of improving the depressed condition of the sugar business, to encourage the establishing of other farm industries suitable to the country and to promote agricultural education in the islands, a thing which has heretofore received little attention. Four principal and eight sub-sections for the study of the sugar cane industry will be established, nine botanical stations have been placed under its charge, at which promis-

ing economic plants and new varieties will be tested.

An agricultural school has been established at Dominica in connection with the botanic station there, and others will be started at St. Vincent, St. Lucia, and St. Kitts-Nevis as soon as the necessary land is obtained. Grants will be offered to enable certain institutions to employ teachers in agricultural science and possibly a number of scholarships will be provided for the most promising pupils; and in co-operation with the central educational authorities in each colony, the teachers in the elementary schools will be given a course of instruction in the principles of agriculture to enable them to give simple instruction and conduct school gardens. It is proposed to attach an agricultural instructor to each of the botanic stations, who will travel about holding meetings and demonstrations and imparting information on improved methods directly to the planters; and, in addition, instructors or experts in special lines, as budding or pruning fruit trees, curing tobacco, etc., will be employed to spend a month or two on each island. The publications of the department, including handbooks on the cultivation of special crops, bulletins and leaflets, will also be a means of diffusing popular information. The first year it is proposed to spend £4,500 and after that the annual grant will be £17,500.

From 4 lbs. of Moneymaker potatoes P. Walstrum, Scandinavia, has gathered 157 lbs. of crop.

The Nebraska Experiment Station recently issued a bulletin on Home Made Windmills that has been in great demand—requests for it coming from all parts of the world. Copies of it can still be had by parties desiring it.

PROVINCIAL LAND SURVEYORS' ASSOCIATION.

Under authority of sections 39, 40 and 41, Cap. 121, R.S.M., the following only are entitled to practice as Provincial Land Surveyors in Manitoba:

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Bayne, G. A.,	McPhillips, R. C.,
Bourne, Robt.,	" Simpson, G. A., "
Chataway, C. C.	Young, R. E., "
Doupe, Joseph,	Bemister, G. B., P. la P.
Doupe, J. L.,	Francis, J., Poplar Point.
Ducker, W. A.,	McFadden, M., Neepawa.
Harris, J. W.,	Rombough, M. B., Morden.
Law, Henry,	Vaughan, L. S., Selkirk, W

By order,
J. W. HARRIS, Secretary,
P. L. S. Association.

N.B.—The practice of surveying in Manitoba by any other person is illegal, and renders him liable to prosecution.

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Time Card, Jan. 1st, 1900.

WEST EAST

Winnipeg	Lv. Tues., Thurs., Sat. 11 15
Winnipeg	Ar. Mon., Wed., Fri. 20 45
Portage la Prairie	Lv. Tues., Thurs., Sat. 13 25
Portage la Prairie	Lv. Mou., Wed., Fri. 18 35
Gladstone	Lv. Tues., Thurs., Sat. 15 05
Gladstone	Lv. Mon., Wed., Fri. 18 15
Neepawa	Lv. Tues., Thurs., Sat. 16 03
Neepawa	Lv. Mon., Wed., Fri. 15 55
Minnedosa	Lv. Tues., Thurs., Sat. 17 00
Minnedosa	Lv. Mon., Wed., Fri. 15 15
Rapid City	Ar. Tues., Thurs. 18 20
Rapid City	Lv. Wed., Fri. 13 15
Birtle	Lv. Sat. 19 55
Birtle	Lv. Tues., Thurs. 19 30
Birtle	Lv. Mon., Wed., Fri. 12 30
Binscarth	Lv. Tues., Thurs. 20 50
Binscarth	Lv. Sat. 22 34
Binscarth	Lv. Mon. 11 25
Binscarth	Lv. Wed., Fri. 11 05
Russell	Ar. Tues., Thurs. 21 40
Russell	Lv. Wed., Fri. 9 40
Yorkton	Ar. Tues., Thurs. 1 20
Yorkton	Ar. Sat. 23 30
Yorkton	Lv. Mon. 8 30
Yorkton	Lv. Wed., Fri. 7 00

W. R. BAKER, A. McDONALD,
General Manager. Asst. Gen. Pass. Agt.

Market Review.

Winnipeg, Jan. 8th, 1900.

The retail stores in Winnipeg did an enormous business the week before Xmas. Some of the stores report the largest turnover in their history. The following week business was much quieter, and stock taking was the order of the day the first week of the new year. Business is not brisk at country points. The absence of snow prevents the usual teaming in the lumber woods and also checks demand for provisions and supplies. The share of wheat that has to be sold by farmers to make up money has been marketed, the balance is being held for better figures, consequently money is not moving freely in the country. While business generally is light during the first month of the year, yet the outlook along all lines is very bright and rapid expansion is expected along many lines during the new year. The total volume of the business transacted in Canada shows a big increase over that of 1898. The reduction in the postage rates has resulted in an increase in the turnover. Bank clearings in Winnipeg have been larger than in any previous year. The past year has also seen very few business failures and altogether 1900 finds Canada in a position to make rapid strides in the onward march of progress.

Wheat.

Business has been excessively slow for the last fortnight. The outside markets are creeping along on a hand to mouth basis, and speculation of all kinds is blocked by the high price of money consequent on the war. Another cause of dullness is the reported favorable condition of the winter wheat crop in the U.S. and equally favorable reports from the harvest fields of Australia and Argentina. To a northwestern agriculturist the puzzle is how wheat growing can pay in Australia. The Melbourne Argus recently published a forecast of the wheat harvest of that colony. It says the average yield is 9.37 bushels an acre and that the exportable surplus is 13,000,000 bushels. In 1898 the produce of wheat per acre in Victoria was 6.38 bushels; in 1897, 4.49 bushels; in 1896, 4.01 bushels; in 1895, 8.38 bushels, and in 1894, 10.38 bushels.

If 10 bushels in a good year can carry the Australian wheat grower along, we have still something to learn about economical cultivation.

The local market has been hovering between 64c. and 65c. Fort William, and at the week's end, Jan. 6th, only 64c. could be bid. The local banks are keeping a tight hold on money, which helps to contract business still further. Chicago closed Saturday at 65c.; May closed 68c., nearly a half cent below the morning's quotations.

Any future changes in prices will depend more on the feeling on the continent of Europe in connection with the war in Africa than on the amount of stock in hand and crop prospects.

From the dealer's point of view the season has not been one to boast of. Prices opened brisk and competition was fairly keen on local markets, but prices have sagged till holders must feel badly discouraged. Farmers holding their own wheat will have to hold a little longer before they can realize even as much as they could be offered months ago and the prospects of their doing better are now extremely uncertain.

For the first time in our history, the inspection list is made up in Winnipeg, and so far the new system of inspection is satisfactory from a business standpoint. From the standpoint of quality the report is eminently satisfying. There has been no lowering of the conditions of grade, they have rather been stiffened and yet the proportion of high grading grain of all sorts stands extremely high. Only a fractional quantity of the whole yield of other grains is submitted for inspection and therefore they furnish no criterion for the quality of the total output. It is only what goes through the various country mills that escapes inspection and the quality of the grain ground for home consumption is quite as high as what passes under Winnipeg inspection.

During the last half of 1898 the amount passing Winnipeg inspection at Emerson and Winnipeg was 4,271,250 bus., of which only 44% per cent. graded above 1 Northern. For the last half of 1899 the amount inspected was 17,369,410 bus., of which fully 84 per cent. graded above 1 Northern. This shows fully 16,000,000 bus. of high grading wheat. As we have before indicated, the bulk of the poor stuff is due to premature harvesting and late ripening at Dauphin and one or two backward points in the Territories. Such a record has never before been made even here and it can hardly be surpassed anywhere else in the world.

Mr. Horn's full inspection report for the half year is as follows :-

WHEAT.

Cars.	Grade.	Bushels.
8 Ex. Man. Hard.		6,640
15,008 1 Hard.		12,456,640
2,593 2 Hard.		2,152,190
873 3 Hard.		724,590
839 1 Northern.		696,370
52 2 Northern.		43,160
21 3 Northern.		17,430
13 1 White Fyfe.		10,793
4 2 White Fyfe.		3,320

24 1 Spring.		19,920
147 1 Frosted.		122,010
79 2 Frosted.		65,570
17 3 Frosted.		14,110
484 Rejected 1.		401,720
230 Rejected 2.		198,370
486 No Grade.		403,380
35 Condemned.		29,050
5 Feed.		4,150

20,929 17,369,410

OATS.

Cars.	Grade.	Bushels.
39 1 White.		46,800
173 2 White.		213,600
98 2 Mixed.		117,600
13 No. 3.		15,600
22 Feed.		26,400

350 420,000

BARLEY.

Cars.	Grade.	Bushels.
29 No. 3.		29,000
17 Feed.		17,000
2 Rejected.		2,000

48 48,000

FLAX.

Cars.	Grade.	Bushels.
37 No. 1.		33,000
21 No. 2.		18,900
11 Rejected.		9,900

69 62,100

CARS INSPECTED.

Wheat.		20,927
Oats.		350
Barley.		48
Flax.		69
Total.		21,394

Oats.

Present quotations on the Winnipeg market are 25c. to 27c. and business very quiet. The demand is about at its quietest and deliveries just keep pace with it.

Barley.

Normal, at about the old figures, and very little doing. Prices, 26c. to 28c. for feed and up to 32c. for best malting.

Flour and Millfeed.

Only a trifling amount of business being done. Ogilvie's Hungarian patent, \$1.80; Glenora, \$1.70; Manitoba Strong Bakers, \$1.50; XXXX, \$1.10; Lake of the Woods patent, \$1.90; Strong Bakers, \$1.70; Medora, \$1.40; XXXX, \$1.20 per sack of 98 pounds delivered in Winnipeg. Oatmeal, \$1.70 for 80 lbs. Bran, \$8.50 to \$9. Shorts, \$10.50 to \$11. Corn in car lots on track, 39c. to 40c. per bus. Ground feed, mixed, \$18; barley, \$15.

Horses.

The absence of snow is hindering the sale of horses somewhat, still good heavy horses sell for high figures. The demand for cavalry horses brought out a motley crowd, showing very plainly how hazy some people's ideas are in regard to what constitutes a good cavalry mount. The horses selected at Winnipeg are a good serviceable lot, but are undersized and have rather too much heavy blood in their make-up. The price paid was about \$150. It is to be hoped that they stand their work well and thus give a good account of themselves and their country.

Cattle.

Market is very quiet owing to the heavy supplies killed before Xmas not being worked off. Choice butchers' cattle are worth about 33c. delivered in Winnipeg. Extra choice might go a little higher. Ordinary grades bring from 21c. to 3c. Choice dressed beef brings 51c. to 6c., frozen beef one cent less.

There is a steady demand for milch cows.

Sheep.

Prices only nominal at 4c., as there are no sheep moving. Lambs, 4c. to 5c. Dressed mutton is worth from 31c. to 9c.

Hogs.

The demand continues good and the receipts are fair. 43c. delivered in Winnipeg is the going price for choice live hogs. Dressed hogs are offering more freely and over 6c. a pound has been paid for choice weights. Ontario dressed hogs can be laid down here for less than this figure.

Butter and Cheese.

Dairy.—Separator made butter in prints and tubs is selling in the city in a wholesale way at 22c. to 23c., choice dairy tubs and prints at 18c. to 21c. and round lots at from 14c. to 21c.

Cheese.—Dealers are asking 13c. to 131c.. The outlook for continued good prices in cheese are good for next season. The supplies of 1899 cheese on this side and in England are very low and the demand is good.

Poultry and Eggs.

Market quiet after holiday trade. Dealers are paying 11c. for turkeys and 9c. for ducks geese and chickens.

Eggs.—Fresh eggs are bringing 19c. to 20c. on the local market, or dealers are paying about 18c. for eggs delivered in Winnipeg. Fresh ga-

thered eggs are worth fully 30c. in a wholesale way, while individuals are getting more than 40c. in a retail way.

Hides.

The market is quiet on a 71c. basis for No. 1. Frozen hides are worth 6c.

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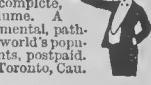
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When writing advertisers, kindly mention The Nor'-West Farmer.

Live Stock Impounded, Lost, or Estry.

In this department we publish a full list of the impounded, lost and estray stock of Western Canada as is available. Notice in one issue, not exceeding five lines of lost or estray stock is given free to any of our subscribers who forward information. Notices exceeding above mentioned length will be chargeable at the rate of 10 cents per line on all overplus matter. The list of impounded stock is compiled from reliable sources; lost stock is open to those whose stock has been lost and who wish to recover them; estray stock is open to those who have taken up estray stock and wish to find owners.

The following is a list of animals impounded, lost or estray since December 20th issue:—

Impounded.

Argyle, Man.—One muley heifer, color red, with white flank and belly, half tail white, with star on face, about two years old. J. Emms, 12, 14, 1w.

Bale St. Paul, Man.—One horse, color bay, four white legs, nose white, about four years old, no mark visible. Joseph Giasson.

Headingley, Man.—Two steers, color roan, one heifer, color black, no marks or brands visible. J. M. Tait.

Headingley, Man.—One cow, color red, piece cut off left ear, and split under left ear, about nine years old, no brand visible. John Taylor, Jr.

Louise Bridge, Man.—One steer, color red and white with piece cut out of the under part of the right ear and fork in point of left. Alex. Gibson.

Otterburne, Man.—One steer, color black, white spot on the forehead, about 1½ years old. No horns. Joseph Theroux.

Parkdale, Man.—One heifer, color red and white, about 1½ years old, no brands. Charles Johnson.

Pigeon Bluff, Man.—One yearling steer, color red, point of right ear cut off, a little white on head, no brand; one yearling steer, color brown and white, no marks or brand. James Anderson.

Portage la Prairie Municipality, Man.—One heifer, color light grey, with red neck and head, about one year old, no mark or brand, points of the horns broken. D. Stewart, N.W. qr. 7, 14, 8.

Rosser, Man.—One heifer calf, color black and white, about eight months old, no brand. Cbas. Buckle.

Saltcoats, Assa.—One large red yearling heifer, no brand visible; rope tied around horns. John Cadden.

Springfield, Man.—One steer, color black, about eight months old, two white spots under belly, no brand; one heifer, color red, about eight months old, white spot on face and belly. W. B. Service.

St. Andrew's Municipality.—One steer, color red, white hairs through the body, white spot on forehead, grey tail, two years old; one heifer, color red, piece cut from point of right ear, branded AC on left hip, one year old. Colin Sutherland.

St. Annes des Chenes, Man.—One heifer, color red and white, piece cut out in V form from the point of the left ear. 1½ years old. F. Nolin.

St. Clements, Man.—One yearling steer, color dark red, piece cut out of the top of right ear. Thos. Hay.

St. Francois Xavier, Man.—One heifer, color grey, white belly, tail grey, about 1½ years old. N. Morin.

St. Francois Xavier, Man.—One steer, color red, left ear pierced, white spot on head, belly and flank white, tail half white: one cow, color red and white, no brand visible: one steer, one year old, color black and white, with white spot on forehead, no brand visible: one cow, color red and white without horns: one cow, color red and roan, short tail. William Ross.

St. Jean Baptiste, Man.—One bull, color red, 1½ years old, white stripe on back, hind legs white. W. J. Brown.

St. Norbert, Man.—One ox, color red, white star on forehead, white belly, right ear split. Chas. Bohemer.

St. Vital, Man.—Three heifers, two color red and one color red and white, about 1½ years old, no mark visible. David Lafrance.

Suthwyn, Man.—One heifer, color red, four white feet, white stripe on each thigh, white belly, half of tail white and spot on top of rump, large white spot like heart on face. P. K. Dickson, 34, 10, 4w.

Winchester Municipality, Man.—One mare, color bay, aged, weight about 1,000 lbs., scar on left hind leg, white spot on forehead, shoes on front feet. R. J. Hartry, 3, 25w.

Lost.

Beaver Hills, Assa.—One grey gelding, six years old and one sorrel mare, seven years old, both branded J. F. on left shoulder, lengthy animals, tails pointed. H. M. Wetteveen, C. C. Ranch.

Clanwilliam, Man.—Three yearlings, dehorned, one steer grey, tag in right ear, one heifer, grey, tag in right ear, marked A. H. Dickie, 1, 15, 19.

Cianwilliam; one steer red, with white spots, hole punched in right ear, tag fallen out. A. H. Dickie, 1, 15, 19.

Cypress River, Man.—Two horses, one an iron grey, branded B on bip, the other a bay, branded L B on shoulder. W. Gould.

Cypress River, Man.—One horse, bay, branded LB on left shoulder, and one pony, iron grey, branded P on left hip. Wyndham Gould.

Ebor, Man.—One bay mare, four years old, branded on left hip. Reward of \$5. Wm. Barker, S.E. qr. 36, 10, 29.

Foxton, Man.—One red and white yearling steer, with bole in each ear and a gouge out of the point of the right ear. D. Campbell.

Gladys, Alta.—One brown mare, five years old, white stripe on face, three white feet, branded J 3 on left shoulder. Reward. F. H. Janes.

Greenwood, Man.—One red yearling, with some white, stamped with letter "D" on right bip and stamp on nose. D. McDonald, 35, 13, 2e.

Greenwood, Man.—One black horse colt, coming two years next spring, with a few white hairs in the forehead. Also one buckskin or cream-colored pony, about nine years old, with black mane and tail. J. Gillicspie, 34, 15, 2e.

Indian Head, Assa.—Three geldings, one bay, weight 1,300, branded CJ, two white hind feet, and one black horse with white legs and face; one bay pony, with white on one fore and one hind foot and stripe on face. M. Billett.

Innisfail, Alta.—One dark red yearling heifer, Shorthorn grade, little white on belly, branded J B on right ribs. John Brown, Jr.

Oak Bluff, Man.—Three calves, two white, with red heads, one red with two or three white spots, all beefers. Chas. Patterson, 9, 1e.

Portage la Prairie, Man.—One two year old light black heifer, ark on left ear. Mr. Williams, Fleet Island.

Rossendale, Man.—Two bull calves, one white the other iron grey. Allen Rittenhouse.

Teualon, Man.—One light roan steer, two years old, stamped A on right hip. A. Wood.

Treherne, Man.—Two roan colts, rising two years old, one of them a horse colt with white face, one a mare with white spot on face, bay mare five years old, with XV on left hip. W. Wilson, 35, 8, 10.

FOUND THREE HORSES.

Oak Lake, Man.

THE NOR'-WEST FARMER,
Winnipeg, Man.

Sirs,—It is with pleasure that I renew my subscription to your paper. Through your "Lost and Estray Cattle" page I found three horses that had been lost about five months and had strayed 120 miles from home.

Yours truly,
FRED G. TAYLOR.

Wallace, Assa. (near Yorkton).—Cow in calf; two yearlings (steer and heifer); two year old steer; all marked with a round three-quarter inch hole in each ear. Cbas. Langstaff.

Estray.

Balmoral, Man.—One bay filly, from two to three years old, with one white bind foot, one white front foot, a white patch on belly and a white stripe on face, is chunky built, with short tail. James Jefferson.

Cypress River, Man.—Three calves, one black, one black and white and one red. D. B. Campbell.

Dauphin, Man.—One three year old muley red steer. John Dunfield.

Duncatib, Assa.—One steer, two years old, red, white spots on belly, white stripe across left ribs. Neil McKay, 14, 25, 2w2.

Ebenezer, Assa.—One pony mare, about five years, brown, white nose, right hind foot white. Gus. Bedke, 6, 25, 3w2.

Esterhaz, Assa.—One caif, black, star on forehead, white belly, left hip and end of tail white. Peter Anderson, S.W. qr. 36, 18, 2w2.

Fletwode, Assa.—One yearling steer, red and white. J. P. Connell, 16, 11, 3w2.

Gainsboro, Assa.—Six calves, one heifer and five steers, heifer red and white, one steer white; four steers red and white. W. T. Fisher, 6, 4, 30w1.

Gainsboro, Assa.—Three spring calves, steers, red, black and red, one of red calves has star on face, black calf has three white feet. Thos. Robson, 20, 4, 30w1.

Hednesford, Assa.—One two year old steer, black, muley. John Fromblil.

High Bluff, Man.—One red and white steer. Jos. Thompson, 21, 12, 5.

Indian Head, Assa.—Two cows, white, one has yellow spot on top of neck and sucking calf, the other calved on the premises. H. Rainville, 22, 15, 12w2.

Kirkpatrick, Sask.—One mare, chocolate, stripe down face, left hind foot white, colt at side. Thos. F. Miller, 20, 47, 27w2.

Lamerton, Alta.—One horse, about 15 years, grey, wedge shaped brand on left shoulder. H. Scales.

Leduc, Alta.—Mare about 11 years, grey, sorrel colt at side, about six feet of rope on mare's neck, sloped T on left shoulder, weight about 1,000 lbs. J. W. Bush, 20, 48, 26w4.

Leduc, Alta.—One gelding, about two years, sorrel, stripe down face, weight about 1,000 lbs.; one gelding, about four years, bay, weighs about 900 lbs.; one mare, about 12 years, sorrel, stripe down face, white hind feet, heart brand on left shoulder. A. R. Bush, 10, 48, 26w4.

Orange Ridge, Man.—One red beifer calf, right ear slit. Thomas Day, 14, 17, 14.

Parkbeg, Assa.—One sucking colt, bay, T on right and left shoulders, hind feet and one front foot white, stripe down face. W. R. Goslings.

Poplar Grove, Assa.—One cow, red and white, dry, deborned. Wm. Archibald, 28, 15, 2w2.

Qu'Appelle Station, Assa.—One spring calf, steer, red and white, white spot on both hips, tip of tail white. Thos. Bray, 3, 18, 15w2.

Rossendale, Man.—One red muley beifer, about two years old. Allen Rittenhouse.

Saltoun, Assa.—One large cow, red, few white spots on side. J. B. Gillespie, 14, 20, 12w2.

Stony Plain, Alta.—One mare, aged, bay, about 1½ hands high, white heels. Joseph Sarard.

Strathcona, Alberta.—One horse, black, weight about 1,000 lbs., P on left shoulder. Dau McDonough, 22, 21, 23w4.

Teualon, Man.—One red yearling steer, with white spot on forehead and white under belly. Wm. W. Bond.

Treherne, Man.—One red and white heifer calf, one black muley bull, with white spots, rising two years old. A. Steadman.

Treherne, Man.—One red steer, undersized, supposed to be rising two years old. J. J. Staples, 5, 8, 10.

Umatilla, Man.—One brown mare, one and one-half years old, white face and one white foot. M. Harkness.

Wetaskiwin, Alta.—One yearling heifer. C. W. Thompson.

Wolseley, Assa.—One boar, black, white stripe on face, white feet. Paul Hubuer, 22, 17, 9w2.

Yorkton, Assa.—One cow, red, white flanks, small star on forehead, had bell on. C. Hoehn, 21, 28, 4w2.

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Manitoba Poultry Show.

It has been decided to hold the annual poultry show of the Manitoba Poultry Association in Winnipeg from Feb. 19 to 23. The prize list will be out in a few days, and will be sent to all who desire it. A good list of special prizes has been secured in the city, and some have been sent in from the country. Any party desirous of helping the association's prize list should send in their prize at once, so that it may be incorporated in the prize list. E. R. Collier, who has acted as secretary for some time, has resigned, and S. Wise has been appointed in his place. Applications for prize lists should be made to S. Wise, 579 Elgin ave., Winnipeg.

A Cheap Form of Meat.

Poultrymen have found that fresh meat in some form is very desirable for successful winter egg production. All meat scraps should be saved for the chickens, and some eastern poultrymen find it profitable to buy old used up horses as chicken feed. The hide goes a good way towards paying for the animal and the bones and flesh are converted into good eggs. One Manitoba farmer shoots and snares a lot of rabbits and feeds them to his hens as fresh meat. Others find fish an excellent food, more especially for ducks, though, than for hens. Another plan of getting fresh meat for the hens is to take all the scraps at pig-killing time, with the lights and intestines after being cleaned, and freeze them in small kegs. One of these kegs can be opened from time to time and the hens allowed to pick what they want. It is always better to control the amount fed them. Too much fresh meat induces scouring. About a pound a day for sixteen hens is sufficient. Failing any of these supplies cut green bone comes next best, but in country places this may be hard to obtain. Arrangements can generally be made with a local butcher for his supply of bones.

Ground meat can always be had from the dealers in poultry supplies, and many find good results from it, but it must be fresh.

Nine out of every ten eggs consumed in Great Britain are of foreign origin.

At the recent London Dairy and Poultry Show an Irish lady was paid \$150 for her turkey gobbler.

Young bride (beginning housekeeping): "What miserable little eggs again! I really must tell the grocer to let the hens sit on them a little longer."

As an indication of the room for an extension of the poultry-raising business in this country, it is worthy of note that Hamilton Bros., butchers, of Neepawa, brought a ton of turkeys from Ontario for the holiday trade, and in a very short time they were all sold. At the same time they were offering the farmers 12½c. for fowl, and could hardly get any.

W. Walker, of Glendale, Man., has a pullet which evinced the maternal instinct very early in life. She was hatched in an incubator last April, and being free from the restraining influences of any maternal Biddy, she took to housekeeping on her own account. She laid some eggs in secret, and at the tender age of six months and one or two days became the mother of seven diminutive chicks, one of which we are informed, still lives.

The Elkhorn Board of Trade has just issued a neat little pamphlet on the farm lands of that district, showing their suitability for mixed farming and consequent value to intending settlers. The pamphlet is nicely illustrated with photos of the farm buildings of successful men in the district and is a credit to the Board of Trade. Numerous inquiries are being received for this pamphlet from all parts of the country, and it will do much to make the district better known. G. Sylvester is the secretary-treasurer of the Elkhorn Board of Trade, and no doubt those interested in the farm lands of the district can get a copy of it from him.

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F. D. BLAKELY, 285 Ellen St., Winnipeg.

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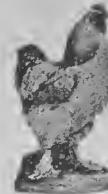
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If you want a cockerel to improve your stock, I can supply you birds bred for utility as well as points.
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While our columns are always open for the discussion of any relevant subject, we do not necessarily endorse the opinions of all contributors. Correspondents will kindly write on one side of the sheet only and in every case give the name—not necessarily for publication, but as a guarantee of good faith. All correspondence will be subject to revision.

Stubble Burner.

J. W. S., Miami, Man.: "Could you tell us where that chap is that had the last patent on the stubble burner? He was at Winnipeg Ex-hibition."

Answer.—We believe you refer to the gasoline stubble burner shown by Holmes & Ashdown, Address a letter of enquiry to A. L. Ashdown, hardware merchant, Portage la Prairie.

Branding Fluid.

W. S., Maskawata, Man.: "I see mentioned in The Nor'-West Farmer, page 519, of an Australian fluid imported by the Department of Agriculture, and that those wanting information should correspond direct with the Department. Please send me the Department's full address."

Answer.—Department of Agriculture, Regina, N.W.T.

Where to get Annual Report.

J. A. Nicholl, Rosedale, Man.: "Kindly inform me whom to apply to for a copy of the report of the Farmers' Institutes, the Cattle, Sheep and Swine Breeders and Dairy Associations for 1899, and the price."

Answer.—From the Department of Agriculture, Winnipeg, Man. There is no charge for these reports. They are sent free.

Wolf Proof Fence.

S. Loney, St. Eustache, Man.: "Referring to the inquiry of C. E. Stewart, Rosther Farm, Maegregor, Man., in the Dec. 5th issue, I would like to say that I bought the 11 bar 57 inch fence and have found it dog proof. The reason I am sure it is wolf proof is that if by chance a dog (even a small one) gets inside he can't get out and has to be let out by the gate. It is my intention to erect more of this fence next spring."

Trapping Gophers.

D. H. Thomas, Dunallen, Man.: "I wish to offer a few suggestions with regard to the gopher nuisance. I think if every farmer would do as I do, purchase traps as well as poisoning the little nuisances, we might soon get rid of them. I trapped over 500 just with four traps. I invested \$11 in traps and find it has paid better than any other investment I went into this year. I had one field literally riddled by them last year, now I have very few left and hope to clear them entirely out next year."

Rules for Institutes.

M. C. G., Killarney, Man.: "I noticed in The Farmer some time ago that there was a proposition on foot to combine the agricultural societies and farmers' institutes of the Northwest Territories. (1) Does this refer to Manitoba also? (2) Is there any code of rules for the working of institutes?"

Answer.—1. No. 2. There is no code of rules for Manitoba. Ontario has a set of rules governing her Institute system, largely because there are so many institutes it is necessary to secure uniformity to make the work run smoothly.

Another Fraud.

The Farmer is indebted to Wm. Best, Calgary, for the following item. Farmers should be on the lookout for this.

"In the 'Phonetic Journal,' England, for Dec. 16th I notice the following paragraph:—A fraudulent fountain pen.—A man has been swindling American farmers by means of a double end fountain pen, one end of which he uses in drawing up contracts for machinery, and the other he presents for farmers to use in putting their signatures to the documents. The ink of the contract fades, and a promissory note is written above the signature."

The Heaviest Steer.

G. B. Russell, 715 Logan St.: "I would like to know the weight of the heaviest ox or steer that has been killed in Canada."

Answer.—This is a hard question to answer. The heaviest steer we can get track of in this city was killed three years ago by Kobold & Co., which was said to have weighed alive close to 2,700 lbs. The heaviest animal they killed this Xmas was a cow, first at the Industrial, and which weighed close to 2,400 lbs. Gallagher & Son killed Tupper, the first prize steer at the Industrial, for Xmas. He weighed 2,271 lbs. live weight and dressed nearly 70 per cent. We will be pleased to hear from any one who knows of authentic weights heavier than these.

Land Regulation and Ranching.

Small Rancher, Pincher Creek, Alta.: "I have carried on farming operations here for sixteen years and consider stock to be the leading industry of this part of the country. To lease land under the present system is nonsense. Some of the large ranches are provided for and the small ranchers should have some protection. Land is too dear for them to buy at \$3 per acre. The man with no stock can cut hay all round the man that has stock to feed. This will be a serious question for the small rancher to face. I think the only way out is some such arrangement as you propose in your issue of Nov. 6th, 1899, page 802. The man with two or three hundred head of stock is the man for this part of the country, so give him a chance."

Plank or Cement Floor.

John Renton, Braeside Farm, Deloraine, Man.: "I see by The Farmer of the 20th that W. N. Crowell, Napinka, asks the question, What is the best power for chopping grain, cutting feed and why. What is the best floor for a stable, ground, plank, stone or cement? I will leave the first question to be answered by some person that has had experience with wind power. To the second question I would say, decidedly, cement, and why? Because it is cheaper than plank, and cleaner than either plank, stone or ground. Cement will cost a little less than plank in the first place if gravel can be got near at hand, and there is no comparison in the last of plank and cement. I would say to Mr. Crowell, never think of putting a plank floor into a stable."

A Poultry Book.

J. C. F., Douglas, Man.: "Please let me know through your valuable paper if Swedish ducks can be got in Manitoba and at what price? Where can I get a good poultry book?"

Answer.—The Blue Swedish duck has only been recently established. No one is handling them in Canada and probably only one or two in America. One of the best books on poultry is said to be "Poultry Culture," by I. K. Felch, price \$1.50. The latest work is "The New Egg Farm," by H. H. Stoddard, price \$1. It treats of the latest phases of poultry raising and egg production upon an extensive scale, as carried on in the vicinity of large American cities. Both these books can be had through the Nor'-West Farmer for above prices.

Improve Our Cattle.

John Beggs, Clare, Assa.: "I believe we should be proud of the prospect of success that lies before the farmers of the west and proud to see a growing demand for such exports as this new country can produce. Johnnie Butt and Uncle Sam both appear to be on a keen

chase after our cattle, the one for matured fat steers, the other for young stock. As hardy sons of the northern part of one of old England's best colonies, let us endeavor to make our export cattle second to none, in both number and quality, from any other part of the Dominion. We can do so by judiciously breeding and feeding good Shorthorn cattle, and by distributing our immense straw piles to our herds under good comfortable shelter, near by good water."

About Machine Notes.

H. Wheeler: "A sold a machine to B which he gave his note for and never paid any on it. A afterwards sold the same machine to H and gave no note, but has the machine on his premises. What is H to do? Can he be made to pay for it as he never knew about the notes being in B's possession?"

Answer.—The above is an exact copy of this question as it reached the office. It would take a smart lawyer to make it out, as it is somewhat mixed. However, the last question gives us a clue to what is wanted and we take it that the inquirer intends to tell us that A bought the machine from B, giving his note for it. A afterwards sold to H, who was ignorant of the fact that B held A's note for the machine. If these notes are regular lien notes on the article in question, B can take the machine from H. If these notes are only ordinary notes of hand with no lien we do not think B can touch the machine. H at any rate should not pay A until he is satisfied that A can give him a clear title.

How to Enlarge Small Teats.

John Stewart, Regina, Assa.: "I would like to tell your readers how to enlarge small teats on a cow. When a cow comes in the first time be particular to be on good terms with her. As a general thing the front teats are large enough and it is the hind ones that need to be enlarged. I commence milking the hind ones first, milking as quickly as I can, taking care not to hurt her. As soon as the teat is empty, I lift the little milk that is in the pail with my hands against the front teats until I get things as nearly like the calf's mouth as I can, then milk all that I can that time. It is when the front teats are being milked that the cow lets the milk into the hind ones with a rush and thus stretches them. Then finish milking in the usual way. The first few days I use the calf-pail, but as soon as the milk is good I use the regular milk-pail. I continue the above method from two to four weeks, or until the teats are a little larger than you want them, as they will shrink a little milking dry after the second day."

Red Deer Creamery.

S. Flack, manager of the Red Deer creamery, sends us figures showing the rapid increase in the output of the Red Deer creamery. As the figures are given in Mr. Marker's report we omit them. Mr. Flack says:—"The increase in output each succeeding season is an evidence of the interest taken by the patrons and shows that dairying is profitable as now conducted in Alberta. The opening up of the creamery industry here may be said to mark a new era in the progress and development of this district. What was at one time a drug in the market now meets with ready sale at remunerative prices, with an ever increasing demand. Dairying promises for some time, at least, to be a very profitable industry. With a fertile soil

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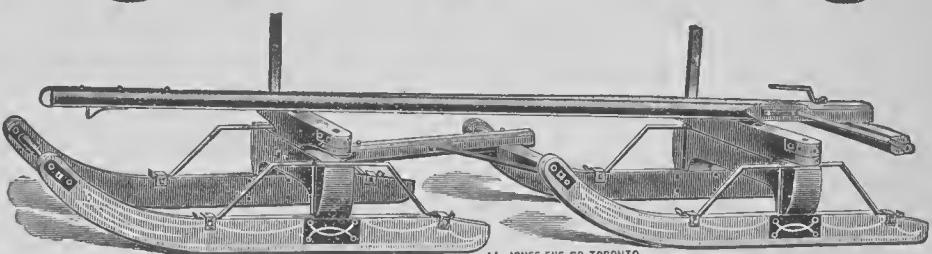
The Speight One-Beam Manitoba Bob-Sleigh

For general use in Manitoba, N. W. T. and northern part of Ontario. Furnished with regular bolsters; 38 $\frac{1}{2}$, 40 or 42 $\frac{1}{2}$ inches between stakes, or with log bunks and clevises.

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capable of producing enormous crops of coarse grains and grasses, abundance of pure water, and healthy climate, enabling the dairyman to produce a pound of butter, pork or beef cheaply, probably cheaper than any other section in the Dominion, it is my opinion that no place presents more encouragement or better opportunities for success."

Successful Vegetable Growing.

Oswald Bowle, Morden, is one of the most successful vegetable growers in Southern Manitoba and annually carries off a long list of prizes at the Morden show. He gives the following as the outline of his general treatment of the soil: "As soon as the land is ready in the spring I work it well with the cultivator and harrow, then go over it with the roller. I next make it up into drills and go over them with the roller. I sow the seed and cover it with the back of a rake. The drills are again rolled and left until the weeds begin to show. Then the cultivator and hoe are kept going and all weeds kept in check. Cabbage, cauliflower and tomatoes I grow outdoors. When about two inches in height they are transplanted. My land is a heavy black loam and I give it plenty of manure." Mr. Bowle has been successful in growing all kinds of vegetables. Part of his success is no doubt due to the liberal application of manure he always supplies, to the careful packing of the soil to preserve moisture, and to the general clean cultivation and care given the garden. The constant watchfulness to do the right thing at the right time is in a large measure the secret of success with any garden. It won't take care of itself, not even when planted, it must be looked after, and herein lies the success.

Nitrate of Soda for Wheat.

R. V. S., Virden, Man.: "I beg permission to ask a few questions. Have been a subscriber of your valuable paper for nearly a year and am pleased in every respect with it.

"I. Hy. F. Moore recommends nitrate of soda as a fertilizer for increasing the wheat yield. Can you recommend it as such? Where can it be obtained and price? When and how is it applied?"

Answer.—Nitrate of soda is used to quite a large extent by old country farmers and by farmers in the eastern states to increase the yield of wheat. It supplies nitrogen in a soluble form and is therefore always sown as a top dressing after the wheat is up. It is then dissolved by the first rain and washed into the soil. It is only productive of profitable results when used on soil that is full of other essential plant foods, or continually supplied with them. So long as our prairie soil is full of vegetable matter which contains nitrogen in combination, it is very doubtful if nitrate of soda will give any increase in crop yield, because it supplies a plant food which is already plentiful in the soil. We advise you not to holler about nitrate of soda. What our soil wants more than commercial fertilizers is more moisture, to dissolve and render available the plant food already present. Prices are such as to preclude its use in Manitoba, but if you wish to know them write R. Alston, florist, Winnipeg.

Power for Small Farms.

R. B.: "What is your opinion of three small farmers getting a horse power threshing machine? Is it the best for a farmer? Would you prefer a three-horse tread power or a two-horse power?"

G. N. L., Shoal Lake, Man.: "Please give the address of the manufacturers, and other information, about tread power machinery in the columns of your paper."

Answer.—Throughout the Maritime provinces the universal power for farm work is the tread-power. Nearly all the threshing is also done

with these powers and small separators. The tread-power is also very popular in Quebec, especially in the eastern townships. It has not been so popular in Ontario, but of late years there has been a great change in regard to this and tread powers are finding their way onto many a farm. Small threshing outfits are also becoming popular in Ontario, for by it a farmer can do his own threshing without much additional help. One of these outfits, run by a two-horse tread-power, can thresh 300 or 400 bushels of wheat in a day and such a machine will do more in the clean wheat of the west. Three-horse tread-powers are now being made for the Northwest with threshers to suit. These machines have a threshing capacity of good clean oats of from 70 to 100 bushels per hour. We would think such an outfit very serviceable to three small farmers. For addresses of manufacturers see our advertising columns. Nearly all the western implement dealers handle these machines.

Eradicating Couch Grass.

W. P. Storey, Millwood, Man.: "In a late issue of The Farmer you say the best way to destroy couch grass is to plough from middle to end of May and sow with barley. Of course that might be all right for a small piece, but as there does not appear to be any satisfactory market here for that cereal one does not care to sow a large acreage. I have about 25 acres very badly infested with couch. It is on land I should like to sow with wheat next spring. How would it answer to sow the wheat broadcast some time in May and plough in with a shallow furrow, say about 4-in. deep and harrow after the surface has had time to dry?"

Answer.—Couch grass is not nearly so dangerous a weed to have on a farm as plenty of our annuals, and even if the wheat were sown on part of that land, as it is you would have a fair crop and you could treat part each year and not have too much barley at once. The plan you suggest would do well in many parts of Southern Manitoba where the land is early, and may do very well even with you if you can make your plowing shallow enough. A good deal will depend on the nature of the season. The wheat will, if the weather happens to be very warm, come up through four inches, but if you could manage with an inch less it would have a much better chance to ripen. The shallower you can put it in the greater will your chance for early ripening. Why not try 10 acres of it in good oats, plowed in, and 10 in wheat plowed in same time and 5 in barley. That would be worth hearing about next fall by many farmers in the same box."

Brood Sows for Alberta.

C. W. Peterson, Deputy Commissioner of Agriculture, Regina, N.W.T., sends The Farmer the following letter, which will be read with pleasure by our numerous readers in the district referred to:—"Arrangements have been completed between Territorial Department of Agriculture and the Canadian Pacific and Calgary and Edmonton Railway Companies, whereby measures will be taken during the coming spring to improve the swine stock in Alberta. The Canadian Pacific Railway Company has granted free transportation for a shipment of hogs from Ontario to the west, the Calgary and Edmonton Land Corporation has made a grant of \$500 to be expended by the Department in furthering the object in view, and the Ontario Government has agreed to co-operate to the extent of purchasing and gathering the animals required free of charge."

"When outlining the scheme for the improvement of cattle in the Territories, decided upon a couple of years ago, the Department made it its sole aim to facilitate, through reduced cost and convenience of transportation, the importation of superior sires only, knowing that female

stock of fair quality was already in the country. The hog question will, however, have to be dealt with on a somewhat different basis. In the first place, the notorious lack of quality in the brood sows at present in the country, calls for an increased number of pure bred boars of high individual merit, and secondly, the wholly insufficient number of sows now in the hands of the farmers, should be augmented by the importation and distribution of a large number of well-bred, selected young females."

"It is now proposed to procure in the Province of Ontario two hundred brood sows of the class described above, due to farrow during May, and twenty-five pure bred boars of the Berkshire, Yorkshire and Tamworth breeds and have them brought west in the early spring. Upon the arrival of this shipment, a series of auction sales, previously advertised, will be held at various points along the line of railway, where a certain number of these animals will be offered for sale at public competition. A low upset price will be placed on each individual head, representing its cost price in Ontario, below which positively no sale will be made."

"The value of a first-class sow in the west, due to farrow within a month, ranges from \$20 to \$30. It is expected that the Department will be able to offer such sows at a minimum price of from \$12 to \$16, according to weight and quality."

"Not more than one boar and two sows will be sold to any one person, and all purchasers will be required to sign a simple form of agreement before taking delivery, setting forth that they are bona fide residents of the North-West Territories and that they will neither slaughter, sell nor remove the said animals from the Territories for a period of two years from date of sale, without first obtaining permission from the Department of Agriculture at Regina."

Note.—Those who desire to purchase hogs under the above arrangement, should communicate with C. W. Peterson, Deputy Commissioner of Agriculture, Regina, in order that the department may form an estimate of the number of animals which can be disposed of at each point.

Market and Show Ring Hogs.

A Reader, Shoal Lake, Man.: "We have all been reading of late a number of protests which have been coming from various quarters against the tendency to make our show ring a collection of fat animals rather than an exhibition of useful money-making ones. The communication in the Dec. 5th issue, by E. Hysop, of Killarney, setting this point forward, was no doubt read with interest by the many readers of The Farmer."

"One line, however, which does not seem to have come in for so much consideration in this respect is the hog exhibit, and yet it is one which represents an industry which is certainly not of small interest or importance to the farmers of Manitoba and the Territories."

"It is pretty well known that Canadian pork has been holding a rather enviable place on the British markets on account of its quality, and that Canadian farmers, as a whole, have been fairly alive to the requirements of the markets, both as to size of animals and finish. But it is perhaps just questionable if the farmers of the west have kept up in this matter with those of Ontario. Do all of our farmers know at just what age, weight, and condition of leaniness and fatness hogs are most wanted? Really, we don't think they all do. Of course our market, being more of a local nature, the requirements in this respect are probably rather more elastic than where a large proportion of the pork production has to go to supply the old country trade. But, judging from some of the carcasses and hogs we have seen marketed this fall, we think we are fairly safe in saying that there is altogether too much carelessness (or ignorance?) exhibited by many of our farmers as to the correct shape in which to bring hogs to the buyer. One farmer brings in nice, long, deep-bodied pigs of some growthy

breed, brought up to say 180 or 190 lbs., at five and a half or six months old, and not too fat nor too lean, and the next fellow brings in something else altogether—and too often don't know the difference.

"Now might it not be possible for our agricultural societies to give more substantial encouragement to a little practical education on this point by offering prizes for the best packer's pig, to be shown in market shape? Do even our large fairs do what they might in this respect? We do not think so. A competent authority on this subject says in regard to the absence of the ideal market hog at Ontario's greatest fair:—

"The writer has walked up and down the pens at the fair at Toronto looking for this kind, and they were nearly as scarce as hen's teeth. To be sure the Tamworths and Improved Yorks were there, and others that might produce the right article, but the conclusion forced itself upon one that a lot of good money was being given as prizes for heaps of fat, worthy only of a day long since gone by. . . . Let us now and forever stop this giving of prizes for breeds of animals that are not wanted to any extent. There are enough back numbers in the farming community to raise plenty of heavy fats without being subsidized, and by all means let them do it, and let us encourage only those breeds known to possess merit as bacon hogs."

"Whatever we may or may not think of the above, might it not be worth while, now that we have so good a market for the hog, to come down handsomely for a first-class object lesson on the hog for the market?"

Note.—While, perhaps, too many of our best animals are over-loaded with fat for show purposes there is another side to this question, which must not be overlooked, and one The Farmer would like to see some of our breeders and feeders take up. It is this: The aim and object of stock breeding is to produce fat animals for man's consumption, if these animals are not made fat and thus show they have that ability, what guarantee have we that they can lay on fat and that they can pass on that ability to their offspring.

The Best Bull for the Ranch.

C. C. Bray, Gleichen, Alta., writes: "When a man resolves to start a cattle ranch, one important point always confronts him—what bulls should be put in the herd at the outset? Being a careful reader of The Nor'-West Farmer and other agricultural papers, he realizes the fact that in the very first year he is laying the foundation of his future herd; and no matter how much care he has taken to gather good stockers only, yet they are far inferior to the ideal of what his stock shall be ten years later. The first calves he raises will have fifty per cent. of the breed of the sire he used, and more than that, they will reflect the other characteristics of the sire used to even a greater extent. At least, I have always found it so.

"While the bull question is so much under discussion it may not be out of place to consider this point. I will confine myself to the beef-producing specimens, of course, and refer to those of the western territories. This, then, narrows it down to the Shorthorn, the Hereford and the Galloway. Which is the best? The experiences of the most successful ranchers prove they are all the best!

"One man finds it most profitable to make his cattle rustle as much as possible in winter, thereby saving a whole list of expenses; and such a one finds the Shorthorn cannot withstand the severity and the swift climatic changes of the western winters, as well as do the two last named, and the result is that they bring a lower figure when sold as beef. Another man is realizing a big price for his Shorthorn grade steers at three years of age because he takes care of them for three winters, and such a one proves, to his own satisfaction, at least, that there is nothing like Shorthorn bulls in a herd. Then, again, another man who is in the habit of selling steers at two years of age is quite sure the Herefords are the only proper animals to use, because his Hereford grade steers mature so very early and bring in quick returns. Still another man claims the Galloways are the proper bulls for this country, as they are the least liable to disease, the easiest to winter and put on fat so quickly in summer.

"All agricultural papers, breeders of pure-bred stock, and even beef buyers, urge the necessity of using only the best pure-bred sires, and yet many intelligent ranchers throughout the country are using the sires which produce the largest (i.e., the heaviest) beef steers—regardless of any particular breed and sometimes keeping even a grade. The reason is easily seen; they strive to produce what the buyer apparently wants, viz.: quantity. Most of the beef here is bought at sight, at so much per head, and that which is sold by actual weight is usually all lumped at one price as long as it is "fat enough for market." It makes no difference whether it be small or large animals, old or young, deformed or perfect, it all goes as one quality. And so this last class of ranchmen will tell us the pedigreed animal does not always fill the bill, because his well-bred, smooth steers from his imported bull, sold, last summer, at \$4.50 less per head than the large, rough steers from his old grade bull.

"Therefore to the question—"Which bulls, or what bulls should be used at the commence-

ment?" I think no set rule can be laid down, as it depends altogether on various other influences. I believe, though, that the Galloway can be more profitably used as an after-cross than as a 'starter' with the average stockers from Ontario or Manitoba, which are often short and chunky and usually small-sized. The Hereford throws larger stock under the 'make-them-rustle' style of ranching. The best results will also be realized by starting with home-bred bulls or those which have become acclimated, for the reason that most of the Ontario yearlings give a very poor calf crop the first season and a high percentage of dry cows the following summer makes the disappointed owner wonder where the profit comes in. Every one will try to mate his breeders with the animal which will impart what they most lack—keeping in view the end to be attained (the production of the best beef)—and surely that is the correct solution of the matter."

PEOPLE GOING FOR A TRIP

TO THE

OLD COUNTRY

should write for

Excursion Rates.

Steamers for Liverpool, London, Glasgow, Belfast and the Continent, leave Halifax, St. John, Boston and New York twice a week.

Settlers desirous of bringing out their friends can obtain very favorable terms. Write for particulars.

WM. STITT,
C.P.R. Offices, Winnipeg



Contains a remedy for all diseases to which Horses and Cattle are liable. Sold by agents in all towns at \$4 each.

Glenora, Man., Oct. 8th, 1898.
S. S. Mayer, Cartwright—I have much pleasure in stating that the Medicine Chest your agent fitted me up with has given me better satisfaction than anything I have tried hitherto. Therefore, I have much pleasure in recommending it to my friends. John E. Brinkworth, 36-3-14.

Prepared only by S. S. MAYER, Cartwright.



PUZZLES

New book just published. Contains 138 illustrated rebuses, 78 amusings and riddles, 25 charades, 70 riddles and enigmas and 129 amusing conundrums, all with their answers. The most complete and fascinating collection of puzzles ever published. Handsomely illustrated. Mailed for 10c. Johnston & McFarlane, Toronto.

THE 'RAZOR STEEL'

Secret Temper, Cross-cut Saw.



We take pleasure in offering to the public a saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keen cutting edge and holds it longer than by any process known. A saw, to cut fast, must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves.

These saws are elliptic ground thin back, requiring less set than any saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other saw is as good, ask your merchant to let you take them both home and try them, and keep the one you like the best.

Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

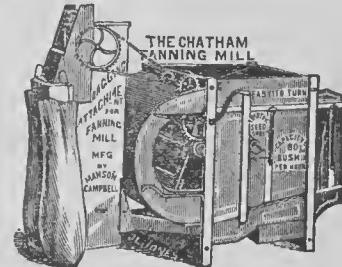
It does not pay to buy a saw for one dollar less and lose 25c. per day in labor. Your saw must hold a keen edge to do a large day's work.

Thousands of these saws are shipped to the United States and sold at a higher price than the best American saws.

MANUFACTURED ONLY BY

SHURLY & DIETRICH,
Maple Leaf Saw Works,
GALT, ONT.

UNEQUALLED RECORD !!



After years of use by thousands of the most progressive farmers of Canada, the yearly sales of the

CHATHAM FANNING MILL

grow larger with each succeeding season. This, with the fact that all other MILLS sold in Ontario do not equal it, is certainly the most convincing proof of its superiority. No farmer should be without a good Fanning Mill. The best is not too good for you. Write for particulars and price.

THE M. CAMPBELL FANNING MILL CO., LTD., CHATHAM, ONT.

HUDSON & CO.,

Photographers,
Stonewall, Man.

Catalogue Printing.

Best facilities for printing Catalogues in Western Canada. Up-to-date covers designed by SPECIAL ARTISTS. Write for quotations.

THE STOVEL CO.

P. O. Box 1310. Winnipeg, Man.



A Recipe.

Wouldst thou be wretched? 'Tis an easy way;
Think but of self, and self alone all day;
Think of thy pain, thy grief, thy loss, thy care—
All that thou hast to do, or feel, or bear,
Think of thy good, thy pleasure, or thy gain,
Think only of thyself—'twill not be vain.

Wouldst thou be happy? Take an easy way;
Think of those round thee—live for them all day,
Think of their pain, their loss, their grief, their care,
All that they have to do, or feel, or hear,
Think of their pleasure, of their good, their gain;
Think of those round thee—it will not be vain.

The Damp Duster.

Recently a series of investigations have been made by Dr. Dove to ascertain the percentage and character of bacteria to be found in the atmosphere of schoolrooms. He found them present in great numbers, particularly when the children moved about and disturbed the dust. Fortunately, although not conducive to health, these bacteria are not of the disease-producing kind. What concerns us most is his suggestion as to the best means—apart from ventilation—of sterilizing the air of interiors. He finds that if the floor be washed, and a damp cloth run over the walls and desks and seats, the air is purer afterwards than after any other method of cleaning. Simply put, it is thus. Microbes and bacteria of all kinds prejudicial to health find a home in the dust that floats everywhere in the rooms of our houses. The best way to get rid of that dust, and consequently of the bacteria, is to remove it, wherever it settles, with a damp cloth. The use of a dry duster merely changes the location of the dust—and its living inhabitants. Very little indeed is removed from the room by this process. In hospitals, infirmaries, and bacteriological laboratories, where scientific cleanliness, or real, as opposed to apparent or superficial cleanliness, is of the first importance, the damp duster is used. Its use in a sick room has often been recommended; and the very same reasons may be given for its use in every room.

Besides its hygienic value, the damp duster has two recommendations. As it effectually removes the dust, and does not merely displace it, the succeeding dusting is simpler; that is, a room does not require dusting so frequently, and does not look disgraceful if neglected for half or a whole day. You will hear housewives complain of "such a very dusty room; it's never decent unless we dust it twice a day." Let such try the damp duster, and see if their labor is not lightened.

Again, a damp chamois leather (the best duster, as it leaves no hairs), is an excellent polisher. Its constant use will keep the furniture in shining countenance. After rubbing with the damp chamois, use a dry leather or old silk duster to polish. Of course, the chamois must be washed, after each time of using, in clear cold water, to which a little ammonia has been added.

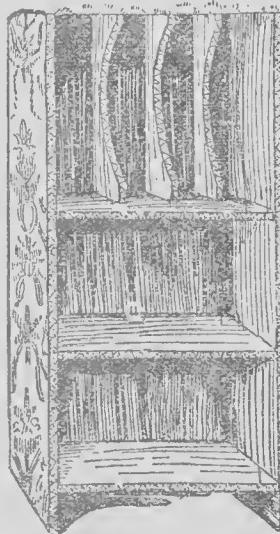
The province of the damp cloth might be usefully extended in the house. A stout cloth wrung out of water is the most efficient cleanser of the staircarpet; and furthermore the dust is not raised and sent floating into every department in the house, as the average maid so loves to see it. For a room not in common use,

"There is always room at the Top"
And that's where you'll find,
GOLD STANDARD
Teas above them all.

where there is not much grit on the carpet, this is also the cleanest broom. A pail should be kept by the side, and the cloth rinsed and wrung out tightly when it becomes soiled. If a little ammonia is added to the water the colors in the carpet will be brightened. There is no need for dust-cloths and elaborate dusting of the room afterwards. In the ordinary method of sweeping a room, it is only the large particles that are caught on the shovel. Most of the dust is sent flying through the room to cling to the ceiling, walls, lurk in crevices, and behind the furniture, and make the room, in fact, very much dirtier than it was before, though its surface may be cleaner to the eye. The old-fashioned recipe for sprinkling a carpet with damp tea-leaves is a dim recognition of the value of a damp surface for attracting dust, and of the importance of getting rid of the latter.—Exchange.

Music Case from a Packing Box.

One can always find a new use for an old packing-case, and, however much ridicule it may have received, the art of constructing usable and not unsightly pieces of furniture out of material lying so constant-



ly under our hand is one to be encouraged and guided by every inventive power at our disposal. The long box shown here is inter-leaved with shelves, three running across, and three narrower pieces of wood being placed lengthwise so as to make roomy partitions for music, both bound and in manuscript. The easiest way to treat these rough pieces of board, unless you possess a carpenter's bench, is to cover them tightly with some material. Cretone does

very well. The edges must be covered with some sort of ornamental gimp or binding, the inside having been stained in the first place.

Short Rules for Long Comforts at Home.

Put self last.
Be prompt at every meal.
Take little annoyances out of the way.
When good comes to any one, rejoice.
When any one suffers, speak a word of sympathy.
Tell neither your own faults nor those of others.
Have a place for everything and everything in its place.
Hide your own troubles, but watch to help others out of theirs.
Never interrupt any conversation, but watch patiently your turn to speak.
Look for beauty in everything, and take a cheerful view of every event.
Carefully clean the snow and mud from your feet on entering the house.
Always speak politely and kindly to servants.

When pained by an unkind word or deed, ask yourself, "Have I never done an ill and desired forgiveness?" — Soldier and Servant.

Conscience.

Nobody saw me do it,
Nobody came that way,
When I found the box on the closet shelf
Where the cakes for supper lay.

Nobody told me not to,
Nobody knows but myself,
But O! I wish that cake I took
Was back again on the shelf.

Nobody knows my trouble,
Nobody ever would guess
That a cake could cause a little girl
So much unhappiness.

Nobody can tell mother
Who took it from the shelf—
But I know, before I go to sleep
I'll have to tell her myself!

There is something radically wrong with character that is impaired by youth.

A pleasant voice, a cheerful countenance, and a good record will introduce you anywhere.

For Over Fifty Years

Mrs. Winslow's Soothing Syrup has been used for over fifty years by millions of mothers for their children while teething, with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for Diarrhea. It will relieve the poor little sufferer immediately. Sold by Druggists in every part of the world. Twenty-five cents a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.

The Nor'-West Farmer

CLUBBING LIST.

THE Subscription Price of THE NOR'-WEST FARMER alone is \$1.00 a year, in advance; by ordering through this office any one of the papers mentioned below, together with THE FARMER, you get the benefit of reduced rates. If more than one of the clubbing papers are wanted, and only one copy of THE FARMER, the **regular published price** of the additional paper must be remitted.

For Example: The combined price of The Weekly Witness and The Nor'-West Farmer together is \$1.50; if you want, also, say, Hoard's Dairyman, the published price (\$1.00) must be added, making in all \$2.50.

We guarantee promptness and accuracy in forwarding all subscriptions, but as all newspapers are crowded with work about the end of the year, it is advisable to send orders early to secure prompt attention.

NAME OF PAPER.	Regular PUBLISHED PRICE.	With NOR'-WEST FARMER.
WEEKLY FREE PRESS , Winnipeg (without premium) <small>(If War Map is wanted enclose 25 cents extra.)</small>	\$1 00 ..	\$1 50
SEMI-WEEKLY FREE PRESS (without premium) <small>(If War Map is wanted enclose 25 cents extra.)</small>	2 00 ..	2 25
WEEKLY TRIBUNE , Winnipeg	1 00 ..	1 50
WEEKLY TELEGRAM , Winnipeg	1 00 ..	1 50
WEEKLY MAIL & EMPIRE , Toronto	1 00 ..	1 50
WEEKLY GLOBE , Toronto	1 00 ..	1 50
WEEKLY WITNESS , Montreal	1 00 ..	1 50
WEEKLY GAZETTE , Montreal	50 ..	1 25
FAMILY HERALD & WEEKLY STAR , Montreal ..	1 00 ..	1 50
BREEDERS' GAZETTE , Chicago	2 00 ..	2 00
HOARD'S DAIRYMAN , Ft. Atkinson	1 00 ..	1 50
RELIABLE POULTRY JOURNAL , Quincy	50 ..	1 25

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Send remittance by express or Post Office Money Orders or by Registered Letter. Cash mailed in letters is at sender's risk.

ADDRESS—

THE NOR'-WEST FARMER, P.O. Box 1310, WINNIPEG, MAN.

Result of an Advertisement.

Andrew French was one of those mortals who are so unfortunate as not to be dependent upon their own efforts for support.

Having graduated at college, he passed two years abroad, and returned to his native land uncertain whether he would be a physician, a lawyer, or a minister of the Gospel, for either of which vocations he deemed himself equally adapted. For "business" he had no inclination.

As he lazily reclined in an easy chair, smoking a fragrant cigar, his eyes fell upon the following "ad." in a paper of that day's issue, which he had been reading:

"Wanted — Intelligent young man, of pleasing address, to canvass for the sale of a domestic article on commission. References required, but experience unnecessary. Call upon or address Brown and Co., 15, — Street."

For a few moments he remained silent, and then muttered:

"I am not destitute of intelligence, and think that I can be pleasing in my address," smiling as he spoke. "I wonder if it would not be advisable for me to confer with Brown and Co.?"

He rose from his seat, started from the house, and wended his way to 15, — Street, where he learnt that the "article" was a kerosene lamp appliance which increased the volume of light at the same time that it decreased the quantity of oil consumed.

He easily—indeed, greatly to the satisfaction of Brown and Co., when they had acquainted themselves with his antecedents—secured a situation as a canvasser, and the next day left the city on his bicycle.

The first place which he "worked" was a thriving village, where his sales were few, and, despite his uniform courtesy, he was subjected to the repulsive treatment which "agents" are wont to receive. His next venture was in a rural district, where the houses were far apart, and he "wheeled" many miles without being allowed to even show what he wished to dispose of, as he was usually confronted at the door by some one, who said: "We are not prepared to purchase anything of the kind to-day," or similarly.

"I declare I pity the poor fellows whose bread and butter depend upon work like this," he frequently remarked to himself, laughingly.

Quite late one showery afternoon he reached a hamlet where there was no hotel, but he finally secured entertainment in a private family.

As he sat on the verandah of the house where he was temporarily domiciled, the first evening of his stay in the place, the tones of some one singing to the accompaniment of a piano were audible, and addressing his host—Thomas Marsh by name—with whom he had been conversing, he asked:

"Who is possessed of such a wonderfully fine voice?"

"It is the daughter of a man who lives in that house," Mr. Marsh replied, indicating with his finger the house nearest his own, "who is fitting herself to teach music."

"I should think her already fitted to teach it—vocal music at least," French observed.

For a few minutes he sat without uttering a word, and then he inquired:

"Are you willing to go with me a little nearer her home? I wish to hear her more distinctly, and were both of us seen by any member of her family I should not be deemed so impertinent as otherwise I might."

"I will conduct you into the room where she is."

*If you want to find out which
is really the best tea in Canada,
buy a package of
Blue Ribbon Ceylon
and it won't take you long to decide*

"Will she not be offended if we go there?"

"She is not the kind of girl that is so easily offended."

Ten minutes later French had been formally introduced to "Miss Stella Reid" by Mr. Marsh, who said:

"Mr. French heard you singing from my verandah, and desired to hear you at a less distance; so I invited him over here."

"That's it," she rejoined, a flush suffusing her countenance.

"Now, please to favor us with one of your best selections," Mr. Marsh remarked, as he and French seated themselves.

Without a word of objection she played and sang several pieces, for which her visitors complimented her.

"Do you sing or play, Mr. French?" she inquired.

"A very little of both," was the reply.

"It will be no more than fair for you to take my place at the instrument," she observed, leaving the piano stool.

"I make no claims to musical ability, but will reciprocate your kindness as well as I can."

Taking the vacated stool, he played a fantasia so skilfully that she nervously said:

"I believe that you are a 'professional.'"

"I assure you that I am not," he rejoined.

"Now, you must sing," she said.

In a mellow tenor he sang a selection from Mendelssohn, so pathetically that tears filled the eyes of his hearers, four in number, as his unknown voice had drawn her parents into the room.

"You may 'make no claims to musical ability,' but it is yours," Mr. Marsh tremulously observed; "and, having it, I do not understand how you came to be selling—"

"'Sh!' fell from French's lips, and the sentence was not completed.

He rose from the stool, and was introduced to Mr. and Mrs. Reid.

"How long shall you remain in the place, Mr. French?" Mr. Reid inquired.

"I cannot say exactly," was the answer.

"While you are here, I hope you will come in to sing and play as often as you can," fell from Mr. Reid's lips.

"You must, Mr. French," the daughter interpolated, in an earnest tone.

"Thank you; I shall be pleased to do so," he replied.

Soon after he and his host left the house, and on their way back to the latter's house he explained how he chanced to be following his present vocation, causing Mr. Marsh to laughingly exclaim:

"Well, I declare!"

After breakfast the next morning he said to Mr. Marsh:

"I should like to remain here two or three weeks; can you conveniently accommodate me for that length of time?"

"As well as not," was the cordial reply.

"Thank you very much."

For two—yes, nearly six—weeks he was a member of Mr. Marsh's household, during which he discontinued his canvassing and passed most of the time with "Stella," as he soon came to address her, while he to her became "Andrew."

They sang—she to him, he to her, or together; they played for each other, or duets, often having quite an audience. They rode, rambled, read together, until—what?

She was acquainted with his antecedents, and had been urgently entreated to share his future with him. Responding to this entreaty, she said:

"If there is anything which I have always held in contempt it is an aimless life, such as has, confessedly, been yours. I think that my affection for you is as strong as yours for me. As soon as you are independent of your father's assistance, and have some visible means of support, I shall not hesitate to say Yes."

Within three months thereafter he had secured a situation as a teacher on a liberal salary. Then, in her home, at her request, with the hearty consent of her parents, they were quietly married.

After the ceremony, grasping him by the hand, Mr. Marsh said:

"It has turned out exactly as I thought it would, Andrew, when you two first met in this room."

What Fools These Mortals Be.

A certain bishop, says Elbert Hubbard, tells me that he is petitioned daily to shuffle dominies for one or more of the following reasons:

1. Our preacher parts his hair in the middle.
2. He rides a bicycle.
3. He does not ride a bicycle.
4. Wears his pantaloons too tight.
5. Wears them too short.
6. Went swimming in a creek.
7. Read the word "bullock" from the bible.
8. Read "sucking child" and "weaned child."
9. Read warnings against bad women, from Proverbs—(personal thrust?).
10. Took some children to the circus.
11. Called oftener upon one family than upon another.
12. Wiggle too much when walking.

"Do you fear the force of the wind,
The slash of the rain?
Go face them and fight them,
Be savage again.
Go hungry and cold like the wolf,
Go wade like the crane.
The palms of your hands will thicken,
The skin of your cheek will tan,
You'll grow ragged and weary and swarthy,
But you'll walk like a man!"

—Hamlin Garland

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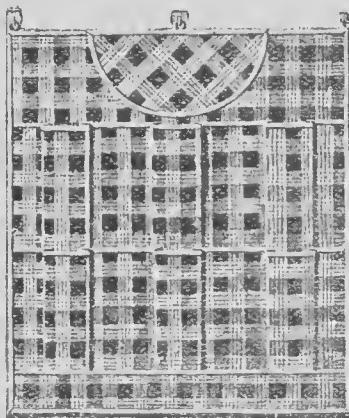
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A Novel Shoe Bag.

To make the very useful shoe-bag shown in illustration, cut from a piece of blue and white plaid bed-ticking one piece twenty-six inches long and nineteen inches wide, two more eight and a half inches long and thirty-three inches wide, and one nine and a half inches wide and five inches long.

Next measure a space ten and a half inches wide in the centre of the piece nineteen inches wide; put pins to mark it. Measure down both the outer sides a space eight inches long; fold from these marks up to the pins previously placed, and cut off the ticking along the lines of this fold. Bind these pieces with red woolen braid, and if desired work each one of the white squares with cross-stitch in red wool.

Then put a pin two inches from the end of one of the long strips, measure seven inches and fold to make a box-plait three inches wide, the edge of the fold coming to the pin. Baste down both sides. Measure



two inches from the other end of the strip and make a similar box-plait. Then pin to the edges of the nineteen-inch-wide piece and put the remainder of the fullness into two more box-plaits to fit the space beneath, taking care to have the spaces between the plaits all the same width. Proceed in the same way with the second strip. Then baste the first strip firmly upon the nineteen-inch-wide piece just above the row of embroidery at the bottom, and the second one above the two rows, and put a row of machine stitching—done with red cotton—between each box-plait. An inch from the top baste the semi-circular piece, and stitch around the curved portion. The straight line is the top of the little pocket, which is intended to hold a pair of stockings. Then, with red woolen braid, bind around the whole of the outside of the piece to which the strips are attached, and sew brass rings to the four upper corners.—Ladies' Home Journal.

An Earl's Advice to Girls.

Earl Grey gave some good and wholesome counsel to the young girls of Newcastle-on-Tyne, when the foundation stone of a new high school was laid. The new girl, like the woman, he said, wished to have a principal hand in making the top of the world spin round. In order to do that she must be properly equipped, and she needed to equip herself with a good character, high spirits, and mental alertness.

The world might say that education could not make an ugly face into a pretty one. But the connection between pleasing and attractive looks and a well instructed, happy and contented mind was far more intimate than many persons supposed. Therefore, a cheerful character and an alert mind gave the pleasant countenance which made the society which gathered

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round it happy and contented. He advised girls to cultivate cheerfulness and mental alertness and to remember that the woman who got success in this world was the one who had the knack of making people round her happy and contented, the woman who had the habit of contented cheerfulness and who did not think anything worth troubling about, so far as it concerned herself, unless it left an ugly weight upon her mind and conscience when she came to die.

He Shut His Mouth.

Bachelors are not usually credited with much knowledge of the care of children, but it is evident that they sometimes have original methods. A middle-aged gentleman, of that state of life, went in to see his married sister, and found her trying to amuse her little boy, who was about five years old. Not long after he arrived she stepped out of the room to attend to some household matter or other, leaving him alone with the child. The boy eyed him dubiously for some minutes. He was a spoiled child, if ever there was one, and had no idea of making promising acquaintances.

The bachelor tried to make the little one laugh, but all he got for his antics was a sour look. Finally, without warning, the child burst out crying. Here was a quandary, to be sure. The man didn't dare to pick the boy up and soothe him. His attempts in a verbal lie were dismal failures. What should he do?

Finally a thought struck him.

"Cry louder," said the man.

The child obeyed.

"Louder yet," urged the bachelor. A yell went up that would have done credit to an Indian.

"Louder still," insisted the man and the boy did his best to obey.

"Louder!" fairly howled his uncle.

"I won't," snapped the infant, and he shut his mouth with a click and was quiet for the rest of the day.

There can be no monopoly in the commodities of wit, honor and wisdom.

Either sand or flour will extinguish burning oil. It is therefore a good plan to have one of these ready to hand in any house where oil lamps are used. On no account must water be used on burning oil, for it only serves to spread the flames and might result in a disastrous fire.

The house in which he had first seen the light of day had been torn down to make room for a wider street, and the little boy, holding fast to his father's hand, viewed the ruins with grief and amazement.

"Why, papa!" he cried, sorrowfully. "Why, papa. I wasn't born anywhere now, was I?"

Dissolve a little salt in the alcohol that is to be used for sponging clothing; particularly where there are greasy spots.

Equal parts of ammonia and turpentine will take the paint out of clothing, even if it be hard and dry. Saturate the spots as often as necessary, and wash out in warm suds.

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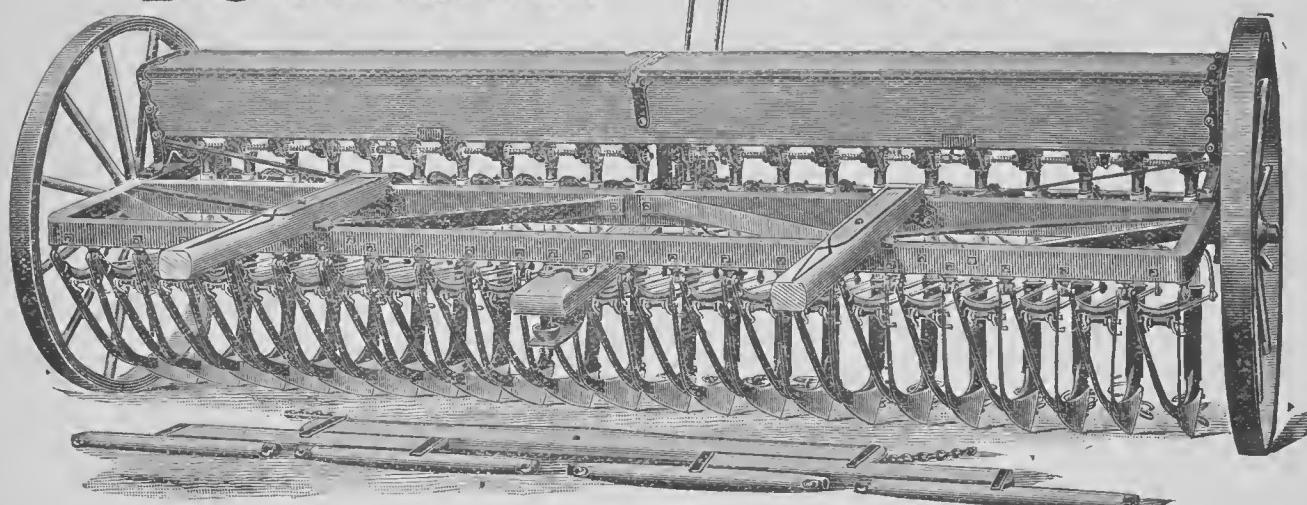
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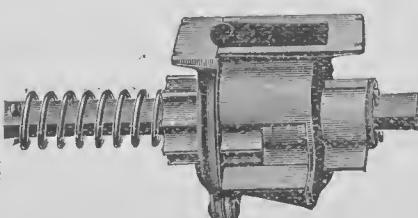
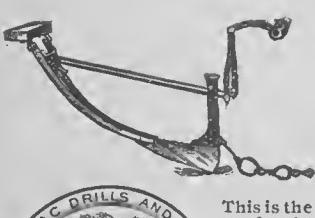
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OUR YOUNG PEOPLE.

The Boy Who Made a Trolley Car.

A Nonsense Story, Written for The Farmer by C. B. Loomis.

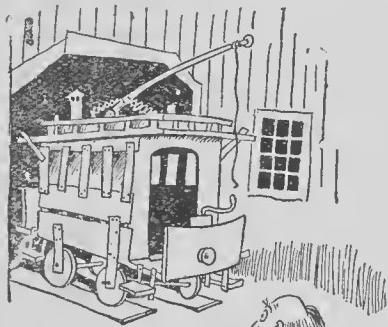
(COPYRIGHT 1899.)

George Starbuck had always lived in the country, which was the best thing that could have happened to him. Have you ever thought, you city child, how little chance you have to become great or famous? You may become rich, but the chances are that you will never be Premier, and all because you were unfortunate enough to be born and brought up in the city.

You have been taught to laugh each week at the poor countryman, who is pictured in the comic weeklies as a sort of cross between a monkey and a sharper, but the countryman learned what neighborliness meant when he was a boy and you will never know its meaning unless you leave the crowded city before it is too late. Go up into the country and learn to be neighborly and self-reliant, and you may get into the history books and future little boys will have to learn all about you as you have to about George Washington and Daniel Webster and Prof. Robertson—all country boys.

George Starbuck lived at Greytown, near Worcester, in Massachusetts, and he could make anything that he had ever seen. At seven he made a wagon, whittling the wheels out of soft pine wood, and his father rode in it a half hour before it fell to pieces and broke his leg.

So when Mr. Starbuck took George to Boston and showed him trolley cars or "electrics" which is the absurd name they give them there, George said: "I'll make one when I get home." Remember he was only thirteen. But make one he



He called his father out and there was a trolley car.

did. How he knew what kind of timber to use passes me, but at the end of the week he called his father out to his workshop, which had formerly been a wagon shed, and there was a trolley car, life size,

and for all the world like one of those that run out to Cambridge and Arlington.

Mr. Starbuck was delighted. "What are you going to do with it, my son?" asked he.

"Well, I had some thoughts of selling it!" said George, "but, after all, money is not everything, so now I think I'll take you and mother and a party of neighbors down to Boston in it, and when I get there the neighbors can go sightseeing and I'll make enough money running it to raise the mortgage that is on this farm."

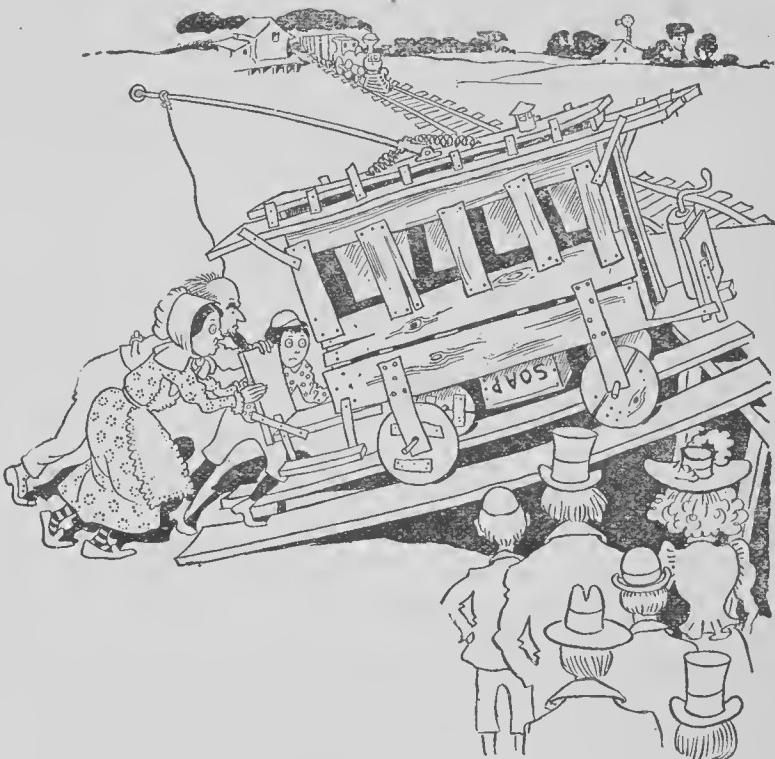
When you grow up you will find that farmers raise a great many things on their farms, but that mortgages are sometimes

the wagon than to put it on. They started the willing oxen home, sure that they would find their way by themselves. Then they all sat down in the car to wait for a freight train to come. In a few minutes a freight train stopped to unload some empty milk cans, and George removed his cap and politely asked a brakeman if he would help him put his trolley car upon a platform car, as he was going to take it to Boston. The brakeman had been born in the country, and that made him willing to be helpful, so he jumped down and signaled the engineer not to start, and then, after the neighbors had all gotten out of the trolley, he, with the help of the Starbucks, put the car upon the platform car. Then George and his parents and all the neighbors stepped inside of the car and the train started for Boston.

Pretty soon the conductor, who was a city bred man, came along and asked them for their fare.

George's feelings were hurt, and he said: "Why, why shou'd we pay any fare? I am taking my parents and some neighbors to Boston in my own trolley car. I will pay you freight for the car, but not one cent for car fare."

The neighbors all cheered these noble words, which sounded very much like the famous sayings of famous men, and the



They put the car upon the platform car.

very hard to raise, but it is a heap of satisfaction to raise one, so you see George was a good boy to answer his father in that way.

"There's no time like the present for things that are pleasant," said Mr. Starbuck; so they decided to take the trolley to Boston the very next day. Now, you may have taken the trolley to Boston yourself, but not in the way they took it—on a platform car.

They invited their neighbors to come early next morning and start with them for Boston, and twenty accepted the invitation. George and his father and mother ran the heavy trolley car upon a low-hung wagon that they used when they wanted to carry plate glass to market, and then the neighbors and all piled into the car, and George hitched a pair of cattle—which is country for a yoke of oxen—to the wagon, and they were drawn down to the station with ease. It was, of course, easier to take the car off

conductor was covered with confusion and left them to enjoy their trip. In a few hours they ran into the freight yards at Boston, and then the pleasant brakeman assisted the three to place their car upon a trolley track and their journey was ended. You may wonder why the neighbors did not assist. They wanted to the worst way, but George said: "No, this is a holiday trip, and I don't want you to feel that you have any chores to do. Mother and father and I will do all that is necessary, and you must have as good a time as you can and meet me here at twelve to-night, for I expect to go back then."

The neighbors gave him three times three and a tiger, but as he didn't know what to do with a tiger in Boston, he gave it back to them, and they went away with it.

George fitted the trolley to the overhead wires, and his mother turned on the current, and then took her seat inside, and

Mr. Starbuck acted as motorman, and they glided up Sumner street as if they had always done it. I think that George is deserving of a good deal of credit for having made so big a vehicle in a week with no tools but a jack-knife and a scythe.

At Arch street they were hailed by a man who was standing on the corner. Mr. Starbuck stopped at once. This naturally puzzled the man on the corner, because as a general thing a trolley car does not stop for passengers. As soon as he stepped on



All tired out and loaded down with samples of food from the food show.

board, he asked George, who came around for his fare, why the car stopped.

"Why, this is father's first trip, and he doesn't know the ropes very well. He thought it would be easier for you to get onto the car if it stopped. The fare is ten cents, for you see this is really my private car, and I'm trying to raise the mortgage on father's farm."

The passenger, who had been born in the country, paid the ten cents at once, but he advised George to stick to the usual five cent fare. "For," said he, "most of these people are city bred and they won't care a snap about your mortgage. They are not neighborly enough."

This was the first time that George had heard that city people were not neighborly, and it grieved him. But the car soon filled up, and even at five cents a head he had a pocket full of nickels. He went out on the front platform. "I guess we can go back to-morrow with the mortgage raised."

Then his mother came out and joined them. They were going through the shopping district and could not move any faster than a mile an hour, because there were so many women crossing the tracks to go to the shops.

"Look here," said Mrs. Starbuck to George, "there's no use in letting these people ride far for 5 cents. It's a private car. Why not call out 'change cars,' and then fill up the car with new passengers?"

I fancy that Mrs. Starbuck had a little city blood in her. George was a dutiful son, and he immediately stepped to the door of the car and yelled, "All out!" and the passengers scrambled out like a flock of sheep, and he was free to fill it up again. Only the first passenger stayed in, and said: "That was a clever move." So George said he might ride all day long if he wanted to, and although he was very busy he did ride all day long, because such chances don't come very often.

Along in the afternoon they were passing the Hotel Vendome, and the neighbors came out and hailed the car, not recognizing George. They had been sightseeing, and they had all registered at the hotel in hopes of seeing their names in the newspapers. Of course, George would not let them pay a cent, and as they nearly filled the car and rode away out to Brookline, he didn't make much money that trip. But he left them at Brookline and ran back quickly to the shopping district, where he soon made up a load.

One time a stout, prosperous looking man got upon the car and asked George what line he belonged to. George told him politely that it was a little line of his own.

Then the prosperous looking man, who said he was the president of one of the leading car lines, quoted the famous words of Gen. Grant, and said: "Do you propose to fight it out on this line all summer?"

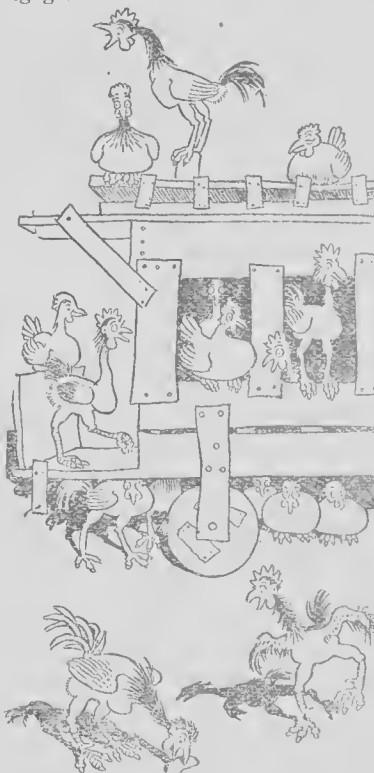
"No, sir, as soon as I raise the mortgage I am going to take my car home and make a hen house out of it."

"Are you a country boy?" asked the man.

"I am, sir," said George, proudly.

"Run all you want, my boy. I give you permission. I was once a country boy myself, and if you can make an honest penny out of these people you deserve to raise your mortgage. Only you must give me a dollar to pay for your license."

George handed him the dollar and he got off the car. And now I must tell you that the man was not president of any company, but simply a bad man who saw a chance to make a dollar out of simple-hearted George. But George was rewarded, as a big theatre party boarded the car and rode five blocks to the theatre, and when they left he counted up his money and found that he had just enough to raise the mortgage.



The hens took to it at once.

It was eight o'clock, and as none of them had had a bite to eat all day, he ran the car off on a siding, and they took dinner at the Parker House, where they had Parker House rolls and maple syrup.

After dinner they went back to the car and found it full of street boys. "Want a ride?" asked George, and the street boys shouted, "Yes," so George took them all

over the city for nothing. But I am sorry to say that the boys were rude enough to ask him whether the car wasn't home-made, and this so incensed Mr. Starbuck that he drove them all out.

But by this time it was nearly twelve o'clock, so they ran down to the freight yards and were lucky enough to find the same brakeman there. The neighbors had come, too, all tired out and loaded down with handbills and samples of different foods, for they had been to a food show at the Mechanics' Institute. They reached Graytown early in the morning. The faithful oxen had come down to meet them, and this time all the neighbors helped to lift the car onto the wagon, so it made it easier.

Then when they had reached the Starbucks, George raised the mortgage as high as he could, and they all cheered and cheered and told him they had never had so good a time in their lives, and they hoped he'd have many happy returns of the day.

Then George put the trolley car into the hen yard and the hens took to it at once.

As for George, he became a simple country boy once more. But if he had been a city boy he would have run that trolley car into the ground.

But there is not a city boy in the Dominion who could have built a trolley car inside of a week, inside of a shed with a jack-knife and a scythe.

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He knows exactly how his neighbors should manage their business, and he is never tired of pointing out mistakes which have been made by them. In fact, his time is so fully occupied in removing motes from his neighbors' eyes that he has no opportunity to attend to the extensive lumber yard on his own premises.



Farm Home of C. E. Ivens, Virden, Man.

feet, with a room for the men, 16x10 feet, at the back of it. The main part of the house has a hallway, with parlor, 12x12, dining room, 12x15, and large pantry, 5x10, on the ground floor. The stairway opens into a hall on the upper flat, which has a large bedroom, 12x20, on one side, and two smaller rooms, each 10x10, on the other side. The heating is done with stoves. Reference to the accompanying diagrams will show more clearly how the house is laid out.

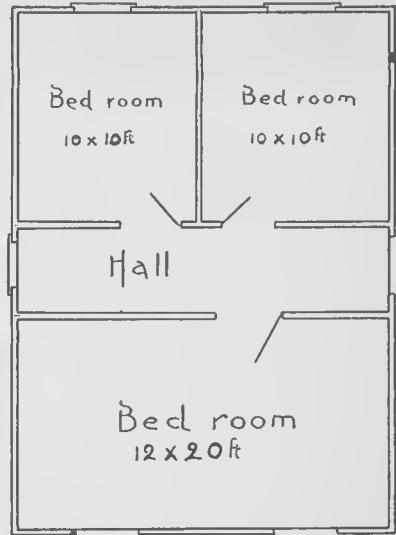
Mutual sympathy and helpfulness make the true home.

"No," says he, with a fine show of being generous-minded. "No, I should not call A. lazy; he has simply no head; he is always pottering about doing something, but accomplishing nothing. He knows nothing whatever about grain." Yet A. has a better crop than the infallible farmer and manages to keep out of debt.

"B." is the poorest hand with a horse I ever saw"—then he will launch out into some long-winded yarn (greatly exaggerated and mainly fictitious) illustrative of the shortcomings of B. in the management of horses. Yet B.'s horses seem to thrive, while more than one belonging to the infallible farmer sickens and dies.

Of course he is unlucky. The clerk of the weather has a most unholy grudge against him. If there be any hail he generally gets hit. The frost seems to nip his grain and leave unharmed that of his neighbors. He will tinker round his yard, putting up a jim-crack fence, a flagstaff, or an ornamental addition to his pig-stye, and the weather will be delightful. But when he has, by a great effort, made up his mind to go a-haying, then the fountains of the great deep will be opened and the clouds will pour down their floods. The same mysterious ill-fortune seems to pursue him when he comes to stack his grain. Perhaps, during the favorable weather, he has been assisting at a barn-raising, for the infallible farmer is a great hand at any gathering of this kind, where there is much consumption of tobacco and an endless amount of gossip.

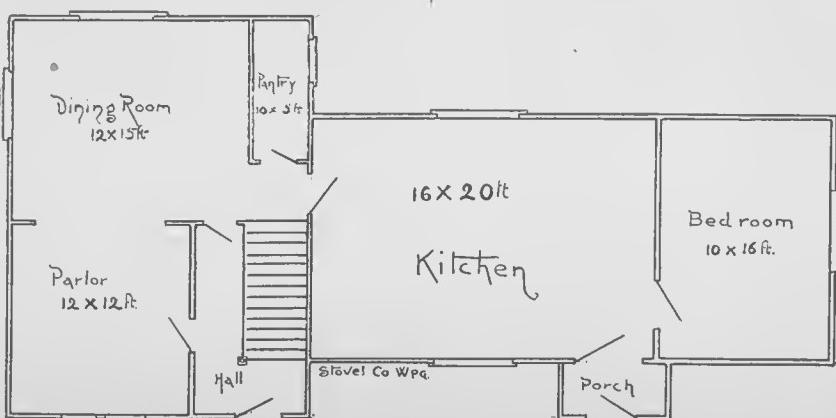
Behold him laying down the law, to some suckling newcomer, as the only true and correct way of cornering log-buildings! The newcomer thinks, "This is indeed, the man for me to cultivate, for he evidently knows all about everything in this country." But it is not long before the newcomer finds out that the infallible farmer is not quite such a power in the



Chamber Plan of C. E. Ivens' Home.

land as he himself would like to imply that he is. The newcomer finds that if he follows his omniscient friend it will be a case of the blind leading the blind, with the foregone conclusion that both will fall into the ditch. The infallible farmer, however, will step upon the newcomer's body and scramble out in some way. And then he will say, "I told newcomer that he would get into a mess, but he would not listen to me." And he honestly expects his hearers to believe this. So a coolness arises between him and the newcomer. But coolness is the normal condition of his relations with his neighbors--unless it be a state of volcanic heat.

The ill-luck showered upon him in the matter of weather is continued in the matter of his dealings with his hired men. It is a most mysterious fact that he can never get a man to work for him who is not lazy, dishonest and utterly worthless. That is the infallible farmer's side of the story. But the man tells tales of being unable to collect any pay for work done, of a few plugs of tobacco or a pair of socks being considered wages enough for several months of work. Sometimes, a man, bolder than the others, will put the matter into a lawyer's hands, and the infallible farmer, after much vain blustering and solemn protestations, will be compelled



Ground Plan of C. E. Ivens' Home.

led to disgorge in part. But, as a general rule, he is very careful to engage men who are not likely to give him any trouble when the day comes for settlement. Shiftless tramps, Russians and half-breeds form the stock from which he draws his hired men. At first, the path of his hired man is a rosy one; the boss is easy-going and affable, liberal with his tobacco (while it lasts) and not unwilling to grant a day off for a shoot, or to lend a horse for a

In the treatment of machinery and farm implements the infallible farmer follows the almost invariable custom of the Northwest, which is to leave machinery and farming tools exposed to all the different kinds of weather which Providence may chance to send. This is good business for the sellers of binders, rakes and wagons. In civilized countries, where the weather is not so severe as it is here, it is the custom to erect sheds for the preservation

no infallible farmer ever fails at that branch of farming. Let crops fail, horses die, calves disappear, sheep be annexed by coyotes and chickens by hawks, let the garden crop be a failure, but the mongrel dog crop will always flourish! It is as sure a mark of the infallible farmer as is his painfully slim wood-pile.

Yet, in spite of reverses, the infallible farmer keeps a fairly serene mind; he is really not responsible for the mysterious workings of Providence, so he does not worry, but, firmly wrapped in his mantle of impenetrable self-conceit he goes on his way. Other people may not put much faith in him, but he believes firmly in himself. A man who can go berry-picking or fishing while his brother farmers are moving heaven and earth to gather their crops, or a man who can take a week's holiday in the height of the haying season, is a man to be admired--in the Latin sense of the word. But why should he preach about the alleged shortcomings of his neighbors? As a lecturer on agricultural topics the infallible farmer might be a dazzling success--if he never lectured twice in the same neighborhood.



Dunstan Rural School, Foxwarren, Man.

This School was opened in February, 1898. As soon as frost was sufficiently out to prepare the ground for tree planting, a holiday was taken and about 150 trees and shrubs were planted and the grounds laid out for flowers. The trees are all alive and made a strong growth last year. It was time well spent last fall for any one to visit the school and grounds, the flower plots being one mass of bloom.

trip to town. The half-breed plays on the fiddle, teaches the boys how to use obscene language in Cree, and introduces various extremely questionable manners and customs into the home circle right under the nose of the mother, who either does not see them or bears with them because "Louis is so good-natured," and "anything for peace and quietness."

The infallible farmer himself is not always a model of household manners. Grubbiness and untidiness are supposed to be the hall-marks of an honest worker. Soap, clean collars and hair-brushes belong to drones. It is an easy-going doctrine and saves much trouble, and it is one which the rising generation is quick to adopt. It is a very honorable profession to earn one's living as a tiller of the soil, but is it necessary to be always advertising that fact by one's dress and the amount of earth on one's boots and hands? So the half-breed or Russian comes into the bosom of the family, and does as little work as possible, except when under the eye of his master. Then, the day of settlement arrives, and the genial fiddle-player finds that the boss was not such an easy-going simpleton as he had imagined him to be, finds that he has smoked his wages, or overdrawn them on his various holidays, finds that he himself has broken the contract (though nothing was said about it at the time) and that he cannot legally claim a cent. So he goes away, cursing in English, French and in Cree--Cree which is commonly supposed to contain no "cuss" words, but has some excellent substitutes therefor. And he is writ down in the book of the infallible farmer as "another good man gone wrong." Then the infallible farmer hitches up his team, goes to town, and gets moderately drunk at the hotel bars, where he picks up another man, green or destitute, to go through the same performance. Cheap hired labor, of course, means poor work.

of farm implements, but we of the west have done away with the fashions of the effete east. So, let the machinery and wagons rust and rot. And if anything should go wrong with the binder or the mower, the infallible farmer will tinker over it lovingly or waste two days in a trip to town for a bolt or screw.

The infallible farmer is a great authority upon the rotation of crops and all the written lore of agriculture; perhaps the trouble is that he knows so much that he

Witless beauty cannot long stand the strain and test put upon it, but declines pitifully—"fades on the eye and palls upon the sense." The true value of intelligence over beauty is strikingly illustrated in animals, if such allusion would not be considered irrelevant. One forgets the unsightliness of the elephant, "that monster of matter and miracle of mind," as Buffon calls him, in the interest aroused by his sagacity, his intelligence and usually kind, gentle character. "This hideous mass of animal that nature seems to have only half finished; this rough draft of a brute, like the sculptor's statue just visible in the block; this wise brute of the east with his post legs and ignominious tail, attracts attention from the lion, the dazzling striped zebra and the magnificent tiger. This poor, patient piece of overgrown awkwardness wins the hearts of all with his graceful tenderness in hand-



Prize Horses at Carberry Fair, 1899.

cannot put any of his magnificent theories into effect. The same remark applies to his management of stock. In theory, no doubt, he believes that animals require regular feeding, but in practice, if, by the visitation of Providence, he is "out of" grain or hay, then his unfortunate animals have to rustle for themselves. It is astonishing how often Providence does visit him in that way. Then some beast, of malice aforesighted, falls sick and dies, and the dogs get a meal. For, of course, he keeps about a dozen, worthless curs;

ling that wonderful trunk of his, which can knock down a house or pick up a pin."

Life is happier if it contains a little sacrifice.

When ironing, if the iron is rough and sticks and is difficult to work, sprinkle a little salt on the ironing-board and rub the iron up and down upon it. It will speedily make the iron smooth again and prevent its sticking.

THREE BOYS IN THE ROCKIES.

Continued from last issue.

In riding home we were passing along a bluff about a half mile from the turkey-roost, when we went by a number of overhanging rocks. One place in particular looked so inviting as to suggest to Frank that we camp there on our turkey hunt, for it was a natural "dugout" inclosed on three sides, overhead, and partly inclosed in front. Just a few rods beyond we found a place that would afford shelter for a pony or so, and then rode on rapidly toward home.

It was about two o'clock in the morning when we pulled up to the stable and dismounted.

We found Lew suffering considerably but glad to learn that we had succeeded in bringing back his pony, and when he learned the full story was quite indignant at the old scoundrel for attempting to steal the animal.

While Lew's arm was mending, Frank and I worked considerably in the clearing, hunted grouse, which were now growing wild, and once killed a large buck, the antlers of which Frank still

When the fall season was at its best and the weather was most suitable, we packed a small outfit in the wagon, placed plenty of hay and a barrel of water convenient to Lew's pony, and after arranging a few other things, locked the door of the tenement and started for the river timber on the turkey hunt we had been contemplating. I rode my pony while Lew and Frank rode in the wagon, driving Nig. The long drive consumed the most of the day and we arrived at the "dugout" about three o'clock.

We soon rendered the place habitable, carried dry leaves from the thick forest nearby, and spreading our quilts had an inviting place to camp.

On our way over we had killed but three grouse, and these we had eaten for dinner, so now we had to content ourselves with roasting a dry jack-rabbit. But even jack-rabbit stands but little show when there are three hungry boys around.

"Well, let's roll in," said I, after the ponies had been cared for, and a small pine tree had been cut to fill up the doorway and keep out the cold.

"Roll in?" said Frank. "What did you come for? Don't you know that moonlight is one of the best times for turkey

Just then a twig broke near me, and looking closely I saw very dimly an animal passing from us out under the roosts.

I instantly remembered that when we shut up the dogs only three of them were there, so called lowly "Gip! here! come here!" and back came the missing dog.

In a moment I heard Lew in a low voice and suppressing his laughter, say: "Come down, Frank, it's gone," and then snicker out laughing, despite his effort to hold in.

"Gracious," thought I to myself, "was that Frank up that tree? How near I came shooting him!" And slipping over to where Lew was, we stepped over and were standing under the tree when Frank came down.

"Did you see it?" asked Frank, as soon as his feet touched the ground.

"Yes!" we both whispered.

"Plain enough to shoot?" he inquired.

"Yes!" said Lew.

"Why didn't you shoot, then?" continued Frank.

"What did we want to shoot Gip for?" said Lew.

"Gip! the dog! thunder and lightning!" exclaimed Frank, now completely bored. "Racket enough for a grizzly."

By this time Lew and I were leaning up



McCullough & McKenzie's Outfit Threshing on Tobacco Creek, near Miami, Man.

owns, not a quarter of a mile from the house.

Lew had become interested in the study of geology and mineralogy now, and during the days his arm was in the sling he must have carried two bushels of specimens of fossil remains to the house, some of which were quite beautiful.

Among the fossils he pointed out to us a great variety of plants, some of which, so he said, are to be found now only in tropical lands, showing that the vegetable growths of parts of our country have changed.

He also found a narrow vein of feldspar, some specimens of which he sent to two or three eastern colleges and subsequently received from each a note of thanks.

He came in one day out of breath, and upon inquiry we learned that while passing around a bluff upon the mountain side he had met a large bear coming in his direction, and had he been two minutes later turning the point boy and bear would have met face to face.

As the animal was large and savage Lew concluded that it was a grizzly, and having no gun, for which he should have been thankful, he turned and beat a hasty retreat.

* * *

shooting?"

"Oh, is it? Then I'm not so sleepy as I thought."

It was now quite dark, so after selecting a number of shells, we started for the roosts, planning to be on the grounds and ready to shoot when the moon would come up.

We soon found the place where Frank and I had some weeks before entered the woods, and knowing that the roosts were between us and the river, quietly passed down among the trees to what we supposed was the proper place.

Here we stood some little distance apart and impatiently waited for the light.

Presently we were all surprised and a little startled at hearing something coming down through the woods and occasionally breaking a twig.

It seemed to be in no hurry, but was coming nearer, and would cross our line about where Frank was stationed.

In a moment I heard limbs shaking, and through the now fading darkness I caught the dim outline of something going up a sapling near where Frank stood.

I instantly raised my gun to my shoulder, but not being able to see dropped it again and had just lowered the hammer when I heard Lew, who stood between me and Frank, snicker.

against a couple of trees, trying hard to suppress a flood of laughter that was making a great effort to escape.

We had just succeeded in finding Frank's gun, which in his haste to climb the tree he had left on the ground somewhere, when a distinct "quit!" followed with "quit-quit-quit!" then "ycap-yeap-yeap!" and we knew our noise had disturbed the turkeys.

This quieted us instantly, and in a moment an indistinct bunch of something could be seen here and there on the limbs, and quite frequently a row of such bunches extending almost the full length of the branch. Then when we stepped quietly around and brought these between us and the now rising moon, the distinct outline of the roosting turkeys could be easily traced.

Before leaving camp, Frank, who knew more about turkeys than he did bears after night, told us to shoot those on the lower limbs first, then in falling they would not disturb any below them; also not to permit one to flop about among the leaves, but rather shoot it the second time.

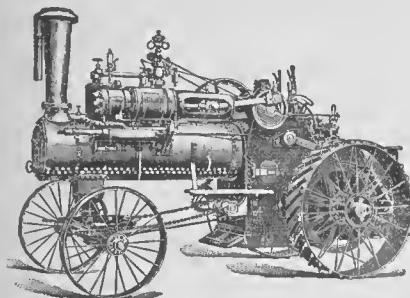
We could now see to shoot very well, so selecting our turkeys, we got ready, and bang! bang! bang! as fast as we

The J. I. CASE THRESHING OUTFIT

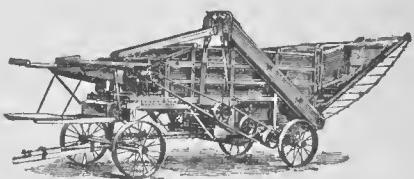
Belmont, Man., Nov. 10, '99.
D. B. MACLEOD,
Gen. Agent J. I. Case Threshing Machine Co.
Winnipeg, Man.

I purchased from your agent, A. C. Houghton, of Belmont, one of your complete traction threshing outfits, including a Blower and Self-Feeder, and must say I am entirely pleased with same. I feel satisfied I can thresh as clean and as quick with it as any machine I've ever tried and seen, and I have tried now three different machines in the last 12 years. The Self-Feeder, to say the least, is a money-maker, and your engine is the most powerful, easiest geared, and handiest engine I've ever seen. I would therefore advise any intending purchaser, if he wants the best and strongest machine, to purchase the J. I. Case outfit every time.

(Signed) MARTIN R. WATSON.



Is the
BEST.



D. B. MACLEOD,

GENERAL
AGENT,

Winnipeg, Man.

could load and fire, and following almost every shot there was a flutter, then a thud, as a large turkey struck the ground.

We had fired five or six times each before the confused birds began to fly. Then one—then three—then half a dozen took wing, then in a moment there was a great fluttering, and the moon-lit tree-tops seemed to be alive with large, awkward turkeys, as flopping their clumsy wings they cleared the branches and made away.

We continued shooting as long as they were within range, but found wing shooting by moonlight to be very uncertain, and could not tell with one exception that any of our wing shots took effect. As a result of one of Frank's shots we heard one drop with a splash into the river below us.

We found eleven that night and carried them home, expecting to return next morning with the dogs and ferret out the rest, for we knew there were more.

Not caring to have the turkeys so near where we slept, we carried them down to where the ponies were, and throwing them into one corner, "closed" the pine tree door, then retired to our quarters.

It was about three o'clock when we were awakened by the dogs, and upon go-

ing to the door, I saw a large animal move stealthily along and pass between where we had kennelled the dogs and the pony shelter. I stepped back to get my gun and tell the boys, and we all slipped to the door, guns in hand, and stood for a moment.

Presently the sly beast came in sight, stepped quietly down to the stable, pulled with his teeth the pine bush from the door, and walked in.

"What in the world is it?" said I.

"Lion, a large mountain lion," said Frank, "and he'll play havoc with our turkeys."

"Yes, and maybe kill a pony in the barn-gain," said Lew.

Just then he walked out with two or three turkeys in his mouth, and passing over into the shadow of a tree, stopped and began his feast.

At that instant a second animal, larger than the first, emerged from among the trees, and slowly approached the feasting lion.

"A grizzly bear!" said Lew slowly, "a hungry grizzly. Now for a Waterloo!" And sure enough.

The lion ceased eating, growled and crouched, moving his tail nervously from side to side.

The envious bear growled in return and continued to advance.

When the animals were about fifteen feet apart the crouching lion gave a spring, and with tremendous force collided with old Bruin in deadly combat. What roaring, clawing, rolling and snarling followed! For a long time it seemed that each would surely slay the other. Once the bear with his weight on his hind feet dealt with his massive paw such a terrific blow upon the lion's jaw that the kingly beast rolled six feet from the place of combat. In an instant he was up, snarling, and with a spring again assailed his powerful antagonist, but only to receive a second blow, that like a thunderbolt sent him sprawling in the other direction. This time he returned, but with the shadow of defeat in his fiery eyes. In a moment they were in each other's claws and jaws; then the grizzled monster stood upon his hind feet, with his powerful arms around the lion's middle and his tusks buried in the comely beast's throat. The snarling ceased, the struggling ended, the dexterous paws of the lion dropped, and presently the victor laid down his lifeless victim as a mother would her sleeping child.

The bear walked about the carcass sniffing, then satisfied that all was over he moved leisurely to his well-earned turkeys and began nosing among the feathers.

"Conscience alive! Did anybody ever see the like?" said Frank.

"No time for comment," said I. "He'll eat those turkeys, then find the others, and maybe kill all of our dogs."

We each loaded with our heaviest shot, but were agreeably disappointed when the bear, after feasting upon the birds, sauntered off into the woods.

The next morning we removed the pelt from the lion, then pushing on into the woods found five more turkeys we had killed the night before.

These were left covered with leaves, and finding the woods vacated by the turkeys, pushed on some distance down the stream among the trees.

We had passed two or three miles down when the dogs began to bark, and hastening down as quietly as possible, found that they had likely disturbed some turkeys feeding, and seeing the dogs the birds had taken to the trees and there safely perched they were stretching their necks and regarding the intruders so intently as not to have observed our approach.

(To be concluded next issue.)



Stone Quarry at Red Deer, Alta.



Improving the Native Plum.

Good varieties of the native plum are about the sole ground of hope for any improvement in plum growing in this high latitude. We have already some very good sorts imported from Minnesota, but it should be kept in mind that these are really picked from the best sorts found in the bush of that State, and some of them are found too laggard in ripening when brought in here. Some two years ago The Farmer undertook to point out, as the result of a good deal of direct observation, that there was very slight hope of improvement through sowing the seeds from even the best we have now in sight. We said then and venture to repeat now that whatever may be tried at experiment stations, the ordinary fruit grower, if he wants to try plums, is most likely to succeed by finding out the best sorts in our native bush and reproducing them by means of runners or grafts. A collection of these made at Beausejour by a representative of The Farmer was last fall sent to the Brandon station, and if they live something good may be found in the lot. Such close observers as John D. Campbell there agree with our view that picked varieties can be easily reproduced as we pointed out, while seedlings run wild. The other day O. M. Lord, one of the most experienced fruit growers in Minnesota, gave his views of the matter in the St. Paul Farmer. He began with plums in 1854, trying "hardy" eastern sorts. After a 12 years' test he was driven back on the natives. Of these he fortunately found a very fine variety and started to reproduce its seeds. Here was the result:

"The fruit of no two trees was alike and none of it was equal in quality to that of the parent. I have since then planted seeds nearly every year, with no marked results as to quality. I can make no claim to improvement of the native plum, except by care in cultivation to increase the size of the fruit. Whatever success I may have reached in producing superior plums has been done by a selection of varieties. Whenever I could hear of a kind having local notoriety of a superior quality, I have, if possible, secured trees or scions, and grown the fruit."

While candidly avowing the failure of his own attempts at improving the plum by any other way than selection, Mr. Lord is careful to mention that by growing immense numbers, perhaps also by natural hybridizing of those good sorts a few good new seedlings have been produced by other growers, of which we may hear more by and by. He points out that the wild plum is not by nature constant like some other wild fruits, but varies within limits. In fact there is no other wild fruit so variable. In this lies its attraction to the fruit enthusiast, but it is only by growing the best sorts together and weeding out every inferior one as soon as it shows fruit, that improvement is probable. It is quite certain that the great mass of the seedlings so got will prove worthless, but from the natural tendency of the plum to vary when produced from seeds, the blending by natural or artificial pollination of the good qualities of those selected wild plums may some day bring us in a few varieties that will repay us for all our failures. With Mr. Lord's deductions from his 40 years' experience we certainly agree, and commend them to the notice of those

who desire the more general introduction into every farmer's garden of this most valuable native fruit.

Ontario Fruit Growers.

The annual meeting of the Ontario Fruit Growers' Association was held at Whitby on December 5 and 6. One of the most important discussions was on fraudulent packing of apples for export, and a disgraceful sample was shown. Another sample was shown as being packed by a "professional packer." It was "faced" with good Baldwins and filled up with apples fit only for making cider. A letter was read from the president of the association, who was then in England, complaining bitterly of the low estimation in which Ontario apples were held and the high repute enjoyed by Nova Scotia apples, largely on account of the amount of fraud practiced by Ontario shippers. Legislation was asked for to prevent the fraud, and the Dominion Minister of Agriculture promised to investigate and check the evil. Dr. Saunders, of the Central Experimental Farm, showed some hybrid apples that were expected to stand the climate of the Northwest. They were produced by cross-fertilization of hardy Siberian wild crab apples with the best hardy varieties under cultivation in the east. The Siberian crab is about the size of a gooseberry, but the new hybrids are about one and a half inches in diameter. He hopes to greatly improve them. Prof. Robertson spoke on the export trade, and reported great encouragement; finely selected pears and large-sized fancy apples nicely packed in cases, holding a basket each, sell well. The Alberta peach, packed in cotton batting, opened out in fine condition. Spraying experiments were again very successful. Financial returns showed a balance on hand of \$635.51 and a total expenditure of \$6,706.89. Officers for 1900: Pres., W. M. Orr, Fruitland; vice-pres., G. C. Caston, Craighurst; sec.-treas., L. Wolverton, Grimsby.

Peter M. Gideon, the originator of the Wealthy apple, has died at his home, Excelsior, Minn., aged 79. This apple, which has proved so valuable to that State, he named after his wife, Wealthy Hall. He was a zealous improver of garden fruits, and managed a fruit growing station at Excelsior, which was of great service to the country.

S. Larcombe, Birtle, Man., reports that he has had a very successful season in his garden. In one frame, 5x10 feet, he grew 140 large cucumbers, two of which measured 32 inches each in length and 3 inches in diameter. His potato crop was an excellent one. He raised 51 bushels from 8 rods of land. On another piece he got 75 lbs. from one potato cut into four pieces. All his crop was correspondingly good. Some bunches of celery measured 42 inches in length. These are only samples of the many good things he had in all lines of vegetables.

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1900.

The fields of Nineteen Hundred,
What harvests shall they bear?
What bread to feed the famishing,
What wealth to crown our care?
The sowing and the reaping,
On many a waving plain,
How shall the farmstead laugh with cheer
Beneath the sun and rain?

White flakes of Father Winter,
Sweet buds of Virgin Spring,
Rich bloom of Matron Summer,
Dear Mother Autumn's wing,
Soft spread o'er sheep and cluster,
The apple and the pear,
The days of rich fulfilment hers,
With beauty everywhere.

And Ceres and her maidens,
As when the world was new,
Shall watch the farmer at his toll—
Watch well in drought and dew.
And yet the old gods smiling
From far Olympus top
Shall drop their genial blessing on
The world's fair garnered crop.

—Margaret E. Sangster.

Prize Grains for Paris.

The following are the awards made by the Territorial Government in the contest for the prizes offered for the best exhibit of grain sent in by the different agricultural societies:

Wheat, Red Fyne — 1 F. Cunningham, Broadview; 2 Alex. Donaldson, Fort Qu'Appelle; 3 W. McMillan, Highview (Moosomin society.)

Oats — 1 P. Grimski, Churchbridge (Northeast Assiniboia society); 2 Thomas Daly, Clover Bar (South Edmonton society); 3 R. Kells, Maple Creek.

Barley — 1 P. Grimski; 2 W. Clements, Cannington Manor (East Moose Mountain society); 3 L. W. Griffin, Moosomin.

The wheat exhibits were judged by D. Horn, Dominion grain inspector, of Winnipeg, and the oats and barley by A. MacKay, of Indian Head. In all 18 agricultural societies sent in exhibits as follows: Grenfell, Qu'Appelle, Moosomin, South Edmonton, Broadview, Maple Creek, Central Saskatchewan, Stirling, Lorne, Whitewood, Moose Jaw, Alameda, East Moose Mountain, Moose Mountain, Northeast Assiniboia, Lt. Cut Arm and Qu'Appelle, South Saskatchewan, Gainsboro, and Pheasant Forks.

Quality in Wheat and Oats.

Some time ago Prof. Robertson offered prizes to the value of \$100 for collections of choice wheat and oats of last year's crop on the straw. This offer seems to have come as an after thought, and only stray individuals were able to collect suitable samples. The prizes for best wheat went to D. and D. Graham, Spillamcheen, B.C., and for oats to Albert Norton, Salt Spring Island, B.C. Of the 24 prizes offered, one for wheat went to Jessie Coombs, Brandon, Man., and one for oats to Florence Hay, Norgate, Man.

A generous friend has put it in the power of Prof. Robertson to offer within the next three years \$10,000 in prizes for grains grown in Canada. Particulars of the competition will shortly be published.

J. J. Laut, Glenca, advises The Farmer that he tried formalin on part of his oats last year, but could learn nothing as there

"John, when that black hulfer is killed we must have her hide tanned for a robe. I see W. W. CARRUTHERS, of Brandon, is making some beautiful robes out of black-haired hides!"

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SAMPLES OF OUR WORK WILL BE SENT TO ANY ADDRESS ON APPLICATION.

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These hides will not get hard with age or wear—the longer they are used, the softer they get. They are also waterproof from the hair side.

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was no smut on any of his crop. His wheat came up very irregularly, but it made no difference to the quality. All graded No. 1 hard.

Grain Crops on the Brandon Experimental Farm During 1899.

By S. A. Bedford, Superintendent.

The past season at Brandon was a very favorable one for grain growing, and the returns are above the average.

Two varieties of wheat, Roumanian and Goose, have given exceptionally good returns, but these are both inferior in quality and cannot be recommended for general cultivation.

Oats have done exceedingly well this year. New Electric, the most prolific, is very similar to the Banner, and may possibly be a selection of that variety.

With barley the cross-bred varieties originated on the Dominion experimental farms take the lead both in two and six-rowed sorts.

In peas, several of the newly tested varieties make a remarkable showing; one of them, Wisconsin Blue, is largely used for domestic purposes when fully ripe.

WHEAT.

Varieties.	No. days Maturing	Yield per acre
bus. lbs.		
Roumanian	121	54.20
Goose	122	50.20
Crown	112	45.40
Laurel	121	43.00
Dawn	107	43.00
Huron	112	42.20
Countess	113	41.40
Byron	109	41.20
Pringle's Champlain	118	41.00
Advance	113	40.30
Wellman's Fife	120	40.10
White Russian	121	39.40
Monarch	121	39.40
Rio Grande	118	39.40
White Fife	121	39.00
Crawford	110	39.00
Old Red River	120	38.50
Fraser	105	38.40
Preston	112	38.40
Red Fife	121	38.30

OATS.

Varieties.	No. days Maturing	Yield per acre
bus. lbs.		
New Electric	106	120.00
Miller	104	113.18
Banner	106	110.10
Buckbee's Illinois	109	109.24
American Beauty	106	108.28
Early Maine	105	107.22
Hazleton's Siezure	104	106.16
Poland	97	105.20
King	106	105.20
Wide Awake	102	103.28
Golden Beauty	105	102.12
White Ligowo	106	100.20
Early Archangel	104	98.28
Bavarian	104	98.18
Abundance	106	98.08
Early Blossom	110	94.24
Salines	111	94.24
Early Gothland	103	93.18
American Triumph	104	93.08
Lincoln	105	92.32

BARLEY.—6-Rowed.

Varieties.	Maturing No. days	Yield per acre
bus. lbs.		
Claude	94	67.04
Summit	89	66.12
Trooper	90	65.40
Mansfield	86	64.33
Argyle	86	63.36
Royal	83	61.42
Nugent	92	61.22
Vanguard	86	58.36
Surprise	88	58.26
Mensury	86	58.16

2-Rowed Varieties.

Logan	88	68.06
Harvey	92	64.28
Dunham	88	63.36
Fulton	92	62.04
Bolton	88	62.04
Newton	95	61.02
French Chevalier	95	60.40
Victor	88	59.28
Nepean	88	58.16
Pioneer	92	56.42

PEAS.

Varieties.	No. days Maturing	Yield per acre
bus. lbs.		
Elder	119	53.30
Chelsea	119	56.00
Wisconsin Blue	123	52.00
White Wonder	116	51.30
Archer	111	51.30
Victoria	121	51.00
Herald	121	51.00
Prussian Blue	111	49.40
Macoun	123	49.40
Carleton	111	49.20
Mummy	111	48.50
Golden Vine	110	48.50
Pearl	126	48.50
Trilby	129	47.00
Mackay	120	47.00
Pictor	111	46.50
Paragon	101	46.40
Multiplier	116	46.20
Bedford	126	46.00
Fergus	114	45.40

AVERAGE RESULTS OF A FIVE YEARS' TEST OF WHEAT.

Name of Variety.	Years included	Av.yld per acre
bus. lbs.		

Goose Wheat	1895-96-97-98-99	40.34
White Fife	1895-96-97-98-99	39.04
Crown	1895-96-97-98-99	37.22
Red Fife	1895-96-97-98-99	37.10
Monarch	1895-96-97-98-99	36.56
Preston	1895-96-97-98-99	36.37
Pringle's Champlain	1895-96-97-98-99	35.58
White Connell	1895-96-97-98-99	35.40
Rio Grande	1895-96-97-98-99	35.22
Hungarian Mountain	1895-96-97-98-99	35.08
Old Red River	1895-96-97-98-99	34.38

It will be noticed that Red Fife falls away behind this year, but in the above table it stands well up when averaged for five years.

AVERAGE RESULTS OF A FIVE YEARS' TEST OF BARLEY.

Name of Variety.	Years included	Av.yld per acre
bus. lbs.		

Trooper	1895-96-97-98-99	57.10
Common	1895-96-97-98-99	56.04
Mensury	1895-96-97-98-99	55.18
Nugent	1895-96-97-98-99	53.30
French	1895-96-97-98-99	53.06
Summit	1895-96-97-98-99	52.26
Surprise	1895-96-97-98-99	51.46
Stella	1895-96-97-98-99	50.46
Royal	1895-96-97-98-99	50.02
Rennie's Improved	1895-96-97-98-99	49.18

AVERAGE RESULTS OF A FIVE YEARS' TEST OF OATS.

Name of Variety.	Years included	Av.yld per acre
bus. lbs.		

Banner	1894-95-96-98-99	97.06
Abundance	1894-95-96-98-99	85.14
Holstein Prolific	1894-95-96-98-99	85.12
Golden Beauty	1894-95-96-98-99	82.22
Golden Prolific	1894-95-96-98-99	79.26
Archangel	1894-95-96-98-99	78.28
Golden Giant	1894-95-96-98-99	78.10
Abyssinia	1894-95-96-98-99	78.08
Columbus	1894-95-96-98-99	77.14
White Russian	1894-95-96-98-99	76.08

At its recent annual meeting at Baldur it was decided by the directors of the Argyll Agricultural Society to hold its next annual show in July instead of October.

From two acres of land, sown with grain imported from Indian Head experimental farm last spring, Thos. Daly, of Clover Bar, Alta., raised 240 bushels of oats—120 bushels to the acre. Mr. Daly is confident that had the grain not been beaten down by the heavy rain it would have gone more to the acre. It was with this grain that he won both first and second prizes at the Strathcona grain exhibit.

The Farmer has recently received two very interesting samples of wheat. One is from Vermillion, on the Peace River, over 350 miles northwest of Edmonton, and was grown by E. J. Lawrence, who has been raising grain for 20 years in that far away corner of Canada. It is bearded and a little touched by frost, but still capital wheat. The other was grown by John Ormiston, Fort Qu'Appelle, and is a sample out of 3,080 bushels grown on 110 acres. It weighs good 65 lbs. to the bushel by the scales of D. Horn, Dominion grain inspector. We have handled many very choice samples of wheat in the last 15 years, but nothing to surpass this.

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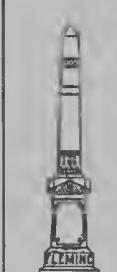
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Annual Meetings.

The annual meetings of the various agricultural societies have been held and officers elected for next year. Their reports are generally favorable, but owing to the pressure of other matter on our space, we can only give a few notes of what took place.

Besides holding its annual meeting, Elk-horn had a dinner party, at which about 50 ladies and gentlemen were present. A good fall show was held, pure breeds being well represented.

Saskatoon proposes to erect permanent buildings, and so far this scheme has general acceptance.

Morden will hold next year's show on the last Thursday and Friday in Sept.

Carman held its 20th annual meeting. The financial statement showed a substantial balance to the credit of the society. The question of purchasing grounds and building a new hall was discussed at some length, and the directors instructed to take steps towards selecting a suitable site.

Turtle Mountain society, with a cash surplus of \$174.20, will hold its next show on October 10, 1900.

Whitewood, Assa., reports its finest grain crop since 1891 and a butter output of 43,000 lbs. All branches of agriculture prosperous.

Glenwood (Souris) will hold its show on the Tuesday and Wednesday following the Brandon fair.

Carberry spent \$2,489.30 and has still \$219.24 on hand.

Crystal City shows a very favorable report; \$700 spent for buildings, only \$170 of it is left unpaid.

Oak Lake—An effort will be made to erect an amphitheatre, the lower part to be used for show rooms. The directors expressed themselves well pleased with the success of the last fair, and hope to be able to make the next still better.

The Killarney Agricultural Society reports a successful year and will hold a summer show in August this year. Geo. McCulloch was elected president; 1st vice-president, Jas. Chapman; 2nd vice president, S. Killoway; sec.-treas., Alexander Leitch.

Indian Head Mill.

The new flour mill at Indian Head, which opened in August last, is meeting with a large measure of success. When first started it did not run full time, but now it is running steadily 24 hours every day. The mill is a frame building, 36x48, on a 9-foot stone wall, and has a capacity of 100 bbls. per day. Power is supplied by a 60 horsepower engine, with suitable boiler and condenser. All the wheat purchased is cleaned before weighing, so that the farmer is thus paid for all the wheat he brings to the mill. The machinery consists of five double standard rolls, one four-roll chopper, a 54-inch Universal bolter, and other machinery, all put in by the Stratford Mill Building Co. A 30-light dynamo is used to light the building, at the same time reducing the insurance rate. The miller is Mr. Rowan, an experienced man, who has been with Ogilvie and also at the Oak Lake mill. This mill will, we think, be a boon to the townspeople as well as to the farmers of the district, some of whom come 40 to 50 miles to the mill and to trade at the stores. Wilson, George & Wilson are the owners of the mill, and they have an elevator as well. Indian Head has been a good market for wheat all season, and no doubt the mill has had something to do with it, as it seems to get its full share of the wheat that is moving. The owners of the mill are farmers as well as millers.

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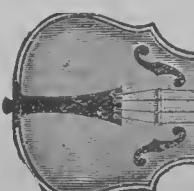
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